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ABSTRACT

The research methods, procedures, and data for determining the impact of six fine arts institutions on the Columbus, Ohio, economy (1978) are outlined. A 30-equation model was used to identify a variety of effects on local businesses, government, and individuals. Researchers examined internal records of the six institutions as well as local, state, and federal records. Audience research and staff surveys were also conducted. Divided into four sections, the report discusses data collection instruments and general procedures, local data collection procedures, local data summary, and weighting and estimation techniques. Subtopics in each section are the audience survey, staff survey, institutional data inventory, community data inventory, and tax-related data. Appendices provide audience survey dates and response rates, instructions to the study coordinator for annotating budget and functional expense statements and institutional data inventory, community data inventory, instructions for developing a calendar which depicts sampling dates, and documentation protocol. All research instruments are included and most instruments provide numerical results of the research. (KC)

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TECHNICAL SUPPLEMENT TO THE ECONOMIC IMPACT OF SIX CULTURAL INSTITUTIONS ON THE ECONOMY OF THE COLUMBUS SMSA

VOLUME I

[and] Volume II--Appendices.

1980

The Johns Hopkins University
Center for Metropolitan Planning and Research

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PREFACE: ORGANIZATION OF THIS REPORT

This technical supplement provides additional information on the research methods and procedures used to develop case studies of the economic effects of forty-three arts and cultural institutions in the following six U.S. cities*:

Columbus, Ohio
Minneapolis/St. Paul, Minnesota
St. Louis, Missouri
Salt Lake City, Utah
San Antonio, Texas
Springfield, Illinois

The history and purpose of this six city project is briefly reviewed as part of each case study report.

The case studies utilized a thirty equation model to identify a variety of effects on local businesses, government and individuals. Data was required from the internal records of the examined institutions as well as from local, state, and federal sources. Audience research was also required as was a survey of each institution's staff.

Instruments and procedures relevant to the collection of these data were developed by staff of the Center for Metropolitan Planning and Research of The Johns Hopkins University (Metro Center). Training seminars for local study staff were conducted in Baltimore and additional procedures developed to document and monitor the management, implementation, and quality of local data collection efforts.

Section I of this technical supplement describes data collection instruments and general procedures. Section II describes the management and implementation of procedures by The Greater Columbus Arts Council staff.

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*The study sponsors in each city were The Greater Columbus Arts Council, Twin Cities Metropolitan Arts Alliance, Springboard, The Utah Arts Council, The Arts and Education Council of Greater St. Louis, and the Arts Council of San Antonio.

Data quality issues are also reviewed. Section III presents the data utilized to arrive at estimates of economic effects. Section IV describes weighting and other relevant data handling issues. Separate appendices provide data on the audience survey dates and response rates, instructions and relevant protocols, and other matters of interest.

SECTION I: DATA COLLECTION INSTRUMENTS AND GENERAL PROCEDURES

A. Overview

The case studies described in this technical supplement were developed in partnership with local arts agencies in the six U.S. cities noted earlier. Each agency was responsible for the local study conduct following procedures developed at the Metro Center and piloted in Baltimore.* Study Coordinators were selected by each partnership agency and included a graduate student intern, a private consultant, agency staff persons, and a professor at a local college. Staffing arrangements and local management procedures in Columbus are described in Section II.

Coordinators from each city participated in workshops held in Baltimore at the Metro Center from October 11-13, 1978. These workshops were developed to orient study coordinators to all phases of the data collection process. Supplemental materials specific to the conduct or documentation of each data collection procedure were developed and forwarded as procedures were implemented. Attention focused initially on the audience survey. Subsequently, materials were developed and forwarded to each city dealing with procedures for the staff survey, for identifying local spending and gathering requisite data from each examined institution, and for gathering requisite community data from local, state, and federal documents or other data sources (e.g. local data bases).

The ability of each city to undertake these tasks simultaneously was materially affected by constraints in study coordinator time, the ongoing

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*Cf. David Cwi and Katharine Lyall, Economic Impacts of Arts and Cultural Institutions: A Model for Assessment and a Case Study in Baltimore, Research Division Report #6. New York: Publishing Center for Cultural Resources, 1977.

availability of other local study staff, and cooperation from local agencies. In the interest of data quality, agencies were encouraged to engage in only those data collection efforts that could be successfully managed by local study staff. Consequently, at any point in time the cities may have been engaged in differing aspects of the data collection effort, necessitating constant monitoring by phone of progress and problems encountered. Documentation and quality control procedures are described below as part of our review of each data collection procedure.

B. The Audience Survey

The audience survey required the development of self-administered questionnaires, implementation procedures and management plans, sampling frames and procedures, documentation procedures, and data handling procedures relating to the editing and keypunching of questionnaires.

Audience questionnaires and procedures reflected the Baltimore pilot study and were designed to allow each city to add additional questions. Survey management procedures are described in Section II below. Exhibit 1 presents the questionnaire as utilized in Columbus.

Prior to the October orientation workshop noted above, study coordinators gathered requisite data for each event/day during the survey period. This included projected attendance by performance (for performing arts groups) and event day (for museums and other groups). Separate sampling frames were developed for each of the forty-three participating institutions and reviewed with study coordinators at the October workshop. (Sampled event days for each institution together with other relevant information are presented in Appendix A.)

EXHIBIT 1

The Greater Columbus Arts Council with assistance from the National Endowment for the Arts and The Johns Hopkins University is conducting a study of audiences for selected cultural activities. We appreciate your cooperation and hope that you will fill out the following questionnaire. Your responses are totally anonymous. Please do not identify yourself in any way. Thank you!

SURVEY

BEST COPY AVAILABLE

Instructions: This form contains two types of questions. Some are multiple choice questions: for them, write in the box provided the number corresponding to your answer. Other questions request information which you should simply write in the box provided (e.g., your zipcode). Please fill this form out by yourself. Feel free to consult other people in your party.

ANSWER FOR YOURSELF ONLY

Where do you live? (Write in number corresponding to the correct response.) (1) City of Columbus (2) Franklin Co. (outside City of Columbus) (3) Fairfield Co. (4) Delaware Co. (5) Pickaway Co. (6) Madison Co. (7) Elsewhere in Ohio (8) Out of State (9) Outside United States

How many years have you been living in the Columbus metropolitan area? (Write in corresponding number of years. If less than a year, write "1". Round to nearest year. Visitors to this area write "0".)

What is your present zip code? (Write in all 5 digits.)

What is your age?

How many people are presently living in your household? (include yourself)

How many years of education have you completed? (1) less than 12th grade; (2) high school graduate; (3) some college; (4) bachelor's degree; (5) graduate or professional degree

Approximately how many miles one-way did you travel to get here? (If less than a mile, write 1. Round to nearest mile)

IF YOU HAVE A SINGLE TICKET OR A SINGLE ADMISSION for this event, how much did it cost? (Put in dollars and cents. If you do not know, write "0".)

FOR PERFORMING ARTS ONLY

IF YOU HAVE A SUBSCRIPTION to this series, what was the price of your subscription? (If you do not know, write "0".)

ANSWER FOR YOUR ENTIRE PARTY

Including yourself, how many people are in your party?

Other than the cost of admission, approximately how much money did you and your party already spend or anticipate spending in connection with today's event? (Write in the appropriate amount in each category; please write in zero if no money was spent in a category.) On:

Public transportation (taxi, subway, bus, train, etc.)?

Restaurant and bar outside institution (food, cocktails, beverages, etc.)

Restaurant, bar or gift shop inside institution?

Lodging (hotel/motel)?

Parking?

Babysitters?

Other?

FOR OUT-OF-TOWN VISITORS ONLY

When you were making plans to come to this community, did you expect that you would be attending this cultural event or institution? (1) Yes; (2) No

IF YES, was it your sole reason for coming to this community? (1) Yes; (2) No

How many nights will you spend in the metropolitan area on this visit?

How many people, including yourself, are with you on your visit to this area?

Approximately how many dollars do you and your party anticipate spending while in this area?

OVER

Exhibit 1 (cont.)

The following questions are concerned with your use and support of local cultural activities. Please answer all three questions for each institution.

	Question 1	Question 2	Question 3
	Do you have a subscription ticket or have you purchased a membership? (1) Yes; (2) No	Including today, how many times have you attended in the last 12 months? (Write "0" if you haven't attended in the last 12 months.)	How many dollars have you contributed in the last 12 months, not including subscription fees, ticket costs or membership fees? (Please write "0" if you have not contributed in the last 12 months.)
Ballet Met			
Columbus Gallery of Fine Arts			
Columbus Symphony Orchestra			
Columbus Zoo			
COSI			
Country Dinner Playhouse			
Great Artist series at OSU			
Kenley Players			
Players Theatre			
Ohio Theatre Film Series			

What is your marital status? (1) Single; (2) Married; (3) Separated or divorced; (4) Widowed

What is your sex? (1) Male; (2) Female

To which race or ethnic group do you belong? (1) White; (2) Black; (3) Mexican American or Spanish speaking; (4) Oriental; (5) American Indian; (6) Other

Last year, what was your total annual family income, before taxes? (1) Less than $4,999; (2) $5,000 to $9,999; (3) $10,000 to $14,999; (4) $15,000 to $19,999; (5) $20,000 to $24,999; (6) $25,000 to $29,999; (7) $30,000 to $49,999; (8) $50,000 or more

What is your present job status? (1) Employed full time; (2) Employed part time; (3) Unemployed

If employed, what is your main occupation? _____

This instrument was developed by the Cultural Planning Group of The Johns Hopkins University, Baltimore, MD 21218. Permission to use this instrument should be obtained from Dr. David Cwi.

Sampling frames used systematic sampling of individuals, assumed a 50% response rate, and sought to obtain no less than 500 completed questionnaires for each institution. Response rates of approximately 70% and higher were common in all cities. Audience study quality was uniformly high, with varied factors affecting the adequacy of sampling procedures at individual institutions, including overestimates of attendance, understaffing, and only one or a few institution performance days available for sampling during the study period. Issues that arose in Columbus that affected the sampling design for particular institutions are discussed in Section II below.

Implementation of the audience survey involved the distribution of an assigned number of questionnaires each event/day following procedures developed with local coordinators. These included briefing sessions reviewing the impact of entry/egress patterns on the choice of distribution sites. Typically, questionnaires were distributed separately but at the same time programs were distributed at performing arts events. In most cases, special survey teams were utilized rather than ushers or other institutional staff. Exceptions are noted in Section II. Collection of instruments occurred before the start of the program and during intermission--if a performing arts event--as well as at the close of the program.

To monitor the quality of the audience survey effort, local staff completed Survey Event Report Forms. These documented various aspects of survey implementation and focused particularly on matters relating to documenting the distribution of questionnaires and response rates. These reports were later checked at the Metro Center against final data tapes. Exhibit 2 presents the form utilized in each city.

Exhibit 2
JOHNS HOPKINS UNIVERSITY CULTURAL POLICY GROUP
SURVEY EVENT REPORT FORM

1. Event Control Number: |____|____|____|____|____|____|____|____|____|____|
(smsa) (inst) (date: yymmdd) (seq)

2(a) Institution Name: _____ (b) Regular Site? (Y or N) _____

3(a) Type of Event: _____ (b) Program Content: _____

(c) Featured artist(s) or group? (Y or N) _____

4(a) Event Starting or Opening Time: _____ (b) Event Ending or Closing Time: _____

5(a) Total Attendance: _____ (b) Estimate? (Y or N): _____

6 List of questionnaire control numbers allocated to the event: _____

_____

7 List of questionnaire control numbers distributed at the event: (answer this question only if you do not fill out question 10 below): _____

_____

8(a) Number of questionnaires returned: _____ (b) Response Rate: _____ %

(c) Time Surveying Started: _____ (d) Time Surveying Ended: _____

9. Sampling Interval: _____

Exhibit 2 (cont.)

10. Questionnaire distribution data:

Distribution Location	Control Numbers Allocated	Control Numbers Distributed
(a)		
(b)		
(c)		
(d)		
(e)		
(f)		
(g)		
(h)		
(i)		
(j)		

11. Date Editing Done (yymmdd): _____

12. Questionnaire numbers rejected during edit: _____

_____

13. Suspicious Questionnaires: _____

14. Comments: _____

_____

The editing of questionnaires was conducted locally by study staff with keypunching in Baltimore and other sites. Local management plans for keypunching and editing are discussed in Section II. Local staff followed edit and keypunch protocols developed by the Metro Center. All questionnaires were forwarded to the Metro Center and a 10% sample inspected and compared to the data tape. This inspection examined editing quality and keypunch error rates. The keypunch error rate for each city is less than one-half of one percent (computed as the number of errors per item).

C. The Staff Survey

Procedures for the implementation of the staff survey and issues affecting data quality are reviewed in Section II below. The staff survey was self-administered and distributed to all staff whether paid or volunteer. Exhibit 3 presents the survey instrument used in Columbus. Local staff edited the staff survey following protocols developed at the Metro Center. Keypunching was performed in Baltimore. Instruments were distributed by institution management together with return envelopes assuring confidentiality. Response rates varied dramatically by institution, necessitating various weighting and estimation procedures described in Section IV below.

D. The Institutional Data Inventory and Annotation of Expenses

Coordinators were provided with suggested procedures for securing requisite data from the internal accounts of examined institutions. These procedures sought to be responsive to institutional unwillingness to "open the books" for inspection and yet to gather data of sufficient

city (SMSA code)	institution	year/month
1840		

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Exhibit 3

STAFF SURVEY

The Greater Columbus Arts Council with assistance from the National Endowment for the Arts and The Johns Hopkins University is conducting a study of the status and impact of selected cultural activities. We appreciate your cooperation in completing this questionnaire. BE ASSURED THAT ALL RESPONSES WILL BE KEPT IN STRICTEST CONFIDENCE. PLEASE SEAL COMPLETED QUESTIONNAIRE IN THE ATTACHED ENVELOPE.

Instructions: This form contains two types of questions. Some are multiple choice questions: for them, write in the box provided the number corresponding to your answer. Other questions request information which you should simply write in the box provided (e.g., your zipcode). Thank you!

QUESTIONS ABOUT YOURSELF

Where do you live? (Write in number corresponding to the correct response.) (1) City of Columbus (2) Franklin Co. (outside City of Columbus) (3) Fairfield Co. (4) Delaware Co. (5) Pickaway Co. (6) Madison Co. (7) Elsewhere in Ohio (8) Out of State (9) Outside United States

How many years have you been living in the Columbus metropolitan area? (Write in corresponding number of years. If less than a year, write "1". Round to nearest year. Visitors to this area write "0".)

What is your present zip code? (Write in all 5 digits.)

What is your age?

How many people are presently living in your household? (include yourself)

How many years of education have you completed? (1) less than 12th grade; (2) high school graduate; (3) some college; (4) bachelor's degree; (5) graduate or professional degree

To which race or ethnic group do you belong? (1) White; (2) Black; (3) Mexican American or Spanish speaking; (4) Oriental; (5) American Indian; (6) Other

What is your marital status? (1) Single; (2) Married; (3) Separated or divorced; (4) Widowed

What is your sex? (1) Male; (2) Female

What is your present employment status at this institution? (1) full time; (2) part time; (3) non-paid full time staff; (4) non-paid part time staff; (5) CETA

During how many weeks of the year will you work at this institution? (write "0" if you do not know)

When you work at this institution, on average, how many hours a week do you work?

What percentage of your income -- exclude spouse -- is derived from employment at this institution?

BEST COPY AVAILABLE

Exhibit 3 (con't)

QUESTIONS ABOUT YOUR HOUSEHOLD

How many children under 18 are in your household? [ ]

How many of the children in your household attend public elementary or secondary schools? [ ]

Do you live in a residence that you own or are buying? (1) Yes; (2) No [ ]

If you own your residence, or are buying, approximately how much do you pay in property tax? [ ]

What is the total annual income before taxes of all persons living in your household (including yourself)? [ ]
(1) Less than $4,999; (2) $5,000 to $9,999; (3) $10,000 to $14,999; (4) $15,000 to $19,999; (5) $20,000 to $24,999; (6) $25,000 to $29,999; (7) $30,000 to $49,999; (8) $50,000 or more

What percentage of total estimated household income is derived from employment at this institution? [ ]

For all members of your household, please estimate the amount currently kept in state banks, credit unions, and savings and loans: (1) 0 to $99; (2) $100 to $249; (3) $250 to $499; (4) $500 to $999; (5) $1000 to $2499; (6) $2500 to $4999; (7) $5000 to $9999; (8) $10,000 +

savings accounts [ ]

checking accounts [ ]

Below are a list of job areas associated with the operation of different types of cultural institutions. The job areas are divided into several categories for easier reference. Please select the duties that best describe your principal occupation. If more than one occupation, write in the number corresponding to the best description of your main occupation. [ ]

ADMINISTRATIVE

(1) Director/General Manager/Business Manager
(2) House Manager/Box Office/Department Heads
(3) Development/Public Relations/Fundraising-Membership
(4) Clerical/Secretarial

ARTISTIC PROGRAM/PRODUCTION

(5) Non-performing technical/managerial (set, lighting, wardrobe, costume design, props, casting)
(6) Performing: chorus, actors, musicians, conductor, dancers, etc.

EDUCATION/RESEARCH/OUTREACH

(7) Librarian/Editor/Photographer/Designer
(8) Instructor/Researcher/Curator/Conservator

SPECIALIZED SERVICES

(9) Maintenance/Grounds/Restaurant-Bar/Gift shop/Shipping
(10) Stagehands/Ushers/Box-Office/Guards/Security/Guide

quality for study purposes. A principal concern was to identify non-salary expenditures made with local firms. Arts and cultural institutions are on the whole quite labor-intensive, so that it is often easy to identify the bulk of local expenditures since they take the form of salary and wage items rather than non-labor expenditures.

The volume and variety of non-labor expenditures was such that institutional personnel responsible for accounts payable could often be expected to have personal knowledge of the vendors for a considerable portion of non-labor expenditures. Appendix B presents the instructions adopted for annotating institutional budget statements. These instructions represent a three-part strategy of identifying the staff person in the examined institution most knowledgeable concerning accounts payable, seeking the most detailed statement of expenses, and requesting that institution staff name the local vendors with whom expenditures were made as a test of their judgement. When institutional staff did not appear able to accurately judge local vendors for particular categories or when it appeared unreasonable to rely on their judgement, invoices were inspected for the items in question. By relying on their personal judgement, it was felt possible to avoid the actual inspection of all or a sample of invoices. (This would require the design of sampling procedures responsive to each institution's bookkeeping procedures and would represent a marked increase in effort for each examined institution that local staff felt intolerable.) Inspection of invoices was avoided unless there was reason to believe that institution staff might be materially in error regarding their judgement of expenditures with local vendors.

Additional data on attendance, staffing, and other matters was provided utilizing an institutional data inventory. Appendix C presents

the form utilized by each institution. The exhibit includes a procedure for the sampling of checking and savings account balances using a random number table.

E. The Community Data Inventory

As part of the Baltimore workshop, study coordinators were oriented to requisite community data and likely local sources. Subsequently, coordinators were sent a Community Data Series Reporting Protocol to which was attached a revised Annotated Community Data Inventory intended to take account of the unique features of each community. These are presented as Appendix D.

The procedure required the provision of data and the documentation of sources. Subsequently, these community data items were forwarded by the Metro Center to local planning agencies and Chambers of Commerce for their review. Additional research by the Metro Center included the gathering of data from these sources as well as from federal documents on the economy, business and employment characteristics of each city.

F. Additional Documentation

Project data collection tasks described to this point included various documentation procedures. In order to develop for the record a comprehensive overview of study procedures, each study coordinator was asked to provide information on the management, organization and execution of each data collection and data handling task.

This documentation included the development of calendars for each surveyed institution indicating actual attendance on surveyed and other event days as well as other matters (cf. Appendix E). Appendix F presents the documentation protocol developed to identify matters relating to the

organization, management and execution of tasks, including circumstances that may have led to different practices on the part of individual institutions. This formal documentation, together with the ongoing evaluation based on our day-to-day contact with study coordinators, and the internal and external validity checks already noted (e.g., correspondence of SERF forms and data tapes, confirmation of community data by other local sources) were the basis for an institution-by-institution evaluation of data quality.

Section II below presents information on the organization and management of data collection procedures in Columbus. Information relevant to an evaluation of data quality is also presented. Section III reviews data used in the study. Section IV reports on various weighting and estimation procedures required by the study.

SECTION II: LOCAL DATA COLLECTION PROCEDURES

A. Overview

In the first section of this technical supplement we described the general data collection techniques and basic research design tasks required of participants in the Partnership Cities Project. We also indicated the procedures used to evaluate and assure data quality. These procedures included ongoing correspondence and telephone contact with study coordinators in each city to review local management plans and approaches to data collection and otherwise assess progress and potential problems. These oversight and documentation procedures included a "for-the-record" review by each study coordinator of the procedures employed in the conduct of each major data collection task and sub-task (cf. Appendix F which presents the Documentation Protocol). In Columbus this information was provided by Tim Sublette.

We are most pleased to acknowledge the principal project staff at the Greater Columbus Arts Council. Ric Wanetik, Executive Director, served as Study Director. Tim Sublette, Assistant Director, was responsible for coordinating the project including the wide array of day-to-day tasks and responsibilities described in this technical supplement. Jackie Brown, Program Associate, assisted in various tasks, especially the collection of operating and financial information from institutional staff. Numerous arts council volunteers assisted in the preparation and editing of questionnaires while a corp of students recruited city-wide through the high school art leagues assisted in the distribution of audience study questionnaires. Exhibit 1 in the case study report lists active local participants in the study process. The following sections describe local data collection techniques and local study management.

B. The Audience Survey

Distribution and Collection

Techniques used for distribution and collection of audience questionnaires varies somewhat among performing and exhibiting institutions. Ballet Metropolitan, the Columbus Symphony Orchestra, Players Theatre of Columbus, and the Columbus Association for the Performing Arts are all performing arts organizations. The Center of Science and Industry and the Columbus Museum of Art are exhibiting institutions.

The distribution and collection of survey instruments at performing arts institutions were supervised by Tim Sublette, the project coordinator, or his personally trained representative.

In exhibiting institutions supervision was provided by a staff person of the institution who had previously been given both oral and written instructions by Tim Sublette. Mr. Sublette also performed spot checks of procedures at these two institutions.

In all cases, distribution techniques were consistent. In performing institutions distribution was made at entry points by handing the questionnaire to the appropriate individual. Distribution was made at the same time that programs were handed out; however, the questionnaires were not inserted in the programs.

At exhibiting institutions, golf pencils were provided and return boxes were pointed out by survey staff. Announcements were only possible at two performances of the Ballet Metropolitan, and on one day at the Columbus Museum of Art.

In the study coordinator's opinion, the distribution and collection was handled well by responsible volunteers or staff members. The particular method developed by the Study Coordinator for exhibiting

institutions ran especially smoothly at the Center of Science and Industry. All six institutions were highly cooperative. Exhibit 4 presents the "Questionnaire Distribution Report" as utilized at the exhibiting institutions. Appendix A presents the audience survey dates and the overall response rate for each institution.

Training of Survey Personnel

At performing arts institutions survey personnel were drawn from a corps of volunteers trained by Tim Sublette. These volunteers consisted principally of arts council staff and high school students recruited from the city-wide student art league. At the exhibiting institutions, regular staff members or regular volunteers of the target institutions distributed the surveys. They were trained by supervisors within the institution (who had previously been trained by Tim Sublette). Exhibit 5 presents the "Visitors Questionnaire Instructions" utilized in the two exhibiting institutions.

Editing

The Study Coordinator supervised the editing of all audience surveys, and trained each editor. Furthermore, each editor was given responsibility and instructions for one block of questions on the questionnaire. Each editor was required to sign-off on their editing in order to ensure complete editing of all questionnaires. The study coordinator interpreted edit protocols developed by the Metro Center in order to facilitate their use by the editors. The estimated time needed to edit one questionnaire was approximately one minute.

Surveys were keypunched and verified by Thirty-Two Programmers in Towson, Maryland. The keypunch error rate was .0014 errors per item (less than one-half of one percent).

Greater Columbus Arts Council
Economic Impact Study

Exhibit 4

QUESTIONNAIRE DISTRIBUTION REPORT

PLEASE HAND OUT QUESTIONNAIRES IN ORDER (by "subject" number stamped in lower right margin box)

AT NOON AND CLOSING TIME OF EACH DAY, PLEASE RECORD THE SUBJECT NUMBER OF THE TOP FORM ON THE STACK OF QUESTIONNAIRES TO BE DISTRIBUTED:

	SUBJECT NUMBERS	
DATE	~~NOON~~ 2pm	CLOSING TIME

Exhibit 5

VISITORS QUESTIONNAIRE INSTRUCTIONS

The Greater Columbus Arts Council with assistance from the National Endowment for the Arts and John-Hopkins University is conducting a study of attenders at cultural activities in Columbus. We appreciate your help in the important job of distributing questionnaires.

To ensure best results, please follow these procedures:

- Present a questionnaire to every 2nd visitor who appears to be eighteen years of age or older. Give a questionnaire only to every 2nd visitor, even if others request one.

- Explain to each visitor that the questionnaire is part of a national study that will be of help to the Columbus community.

- Point out the questionnaire return boxes.

- Offer the visitor a golf pencil if needed.

IMPORTANT: Each questionnaire has a stamped "subject number in the lower right margin box. The questionnaires have been numbered in order. Please keep the stack in order and distribute from the top of the stack.

At ~~noon~~ 2pm and closing time of each day, please record the subject number of the top questionnaire on "Questionnaire Distribution Report" sheet.

This simple record keeping will enable us to determine the date and approximate time each surbey was completed.

THANK YOU. YOUR ASSISTANCE IS VITAL TO THE SUCCESS AND VALUE OF OUR RESEARCH.

C. The Staff Survey

Distribution and Collection

The staff survey was distributed and collected by the primary contact person in each institution:

Ballet Metropolitan	- Executive Director
Center for Science and Industry	- Business Manager
Columbus Association for the Performing Arts	- Executive Director
Columbus Museum of Art	- Director of Development
Columbus Symphony Orchestra	- Assistant Manager
Players Theatre	- Acting Executive Director

The survey together with return envelopes and a cover letter were distributed through regular payroll procedures. Each survey was accompanied by a standard cover letter signed by the head of the target institution stating that cooperation was essential to the outcome of the research project and that all responses would remain confidential. The letters also included the name of the person at each institution to whom the surveys were to be returned.

Editing

The management of the Columbus Museum of Art insisted on special confidentiality measures, which were implemented for all examined institutions. Questionnaires were sealed in envelopes by each respondent. These responses were counted, sealed in a large envelope and transmitted to the Columbus Arts Council by the institutional contact. Tim Sublette delivered a sealed package for each institution to the Council's legal counsel whose secretary then edited them. This secretary was trained

in editing by Tim Sublette. Subsequently, the surveys were forwarded to Thirty-Two Programmers for keypunching without examination by Council staff.

D. The Institutional Data Inventory

Jackie Brown, agency Program Associate, met with each institutional contact and provided close guidance to each individual completing the survey. The institutional contacts for this task were as follows:

Ballet Metropolitan	- Executive Director
Center for Science and Industry	- Business Manager
Columbus Association for the Performing Arts	- Executive Director
Columbus Museum of Art	- Business Manager
Columbus Symphony Orchestra	- Assistant Manager
Players Theatre	- Business Manager

The same procedure was applied to each institution. Questions about the handling of specific data items were answered by D. Alden Smith of the Metro Center. It was reported that each organization acted conscientiously, and in some cases extensive consultation with decentralized departments was necessary in order to complete the data inventory.

E. The Annotation of Expenses

Jackie Brown met with each institution and collaborated closely in the annotation process. The person most familiar with accounts payable participated at each institution. These institutional staff were:

Ballet Metropolitan	Executive Director
Center for Science and Industry	Business Manager
Columbus Association for the Performing Arts	Executive Director
Columbus Museum of Art	Business Manager
Columbus Symphony Orchestra	General Manager and Assistant Manager
Players Theatre	Business Manager

The same procedure was applied at each institution, in most cases taking less than an hour. The little in outside purchasing made the task relatively easy since no calculations were required for line items where everything was purchased locally. Jackie Brown personally participated in each annotation and no constraints were placed on her participation. Questions about the handling of specific data items were answered by D. Alden Smith at the Metro Center. Invoices were provided by Ballet Metropolitan and the Center of Science and Industry at the original annotation and used to verify the percentages spent locally for questionable items. The remaining four institutions did not provide invoices at the original annotation, but questionable items at these institutions were checked to invoices at a later date.

F. The Community Data Inventory

The Community Data Inventory was completed by the Mid-Ohio Regional Planning Commission with assistance from the Ohio Department of Taxation. Tax-related information was subsequently compiled by the Metro Center and verified by a later mailing to the Columbus Area Chamber of Commerce, the Mid-Ohio Regional Planning Commission and the Ohio Department of Taxation.

SECTION III: LOCAL DATA SUMMARY

A. Overview

Sections I and II of this supplement reviewed data collection procedures. (The appendices to this supplement include various study instruments and protocols.) This section presents the data in conjunction with the 30 equation model to derive the effects on local business, government and individuals reviewed in the case study report. Data derived from the audience study and institutional financial/operating data are provided on an institution by institution basis. Employee data is presented in aggregate form only due to confidentiality requirements. Tax-related data and other community data are presented at the level of detail at which they were compiled. Special estimations, if applicable, are discussed in the appropriate sections below. General estimation and weighting techniques are discussed in Section IV.

B. The Audience Data Summary

Exhibit 6 presents the Audience Data Summary. Included for each institution are the total attendance, percentage local attenders, percentage non-local attenders, percentage non-local attenders indicating that their interest in the arts institution was the "sole reason" for their visit, and total spending by local and non-local attenders.

Exhibit 6

Audience Data Summary

	Ballet Metropolitan	Columbus Museum of Art	Columbus Symphony Orchestra	Center of Science and Industry	Players Theatre of Columbus	Columbus Association for the Performing Arts		Total
Total attendance[1]	25,788	83,037	109,323	212,066	19,616	249,090		698,920
% Local attenders	86%	86%	93%	75%	96%	81%		82%
% Non-local attenders	14%	14%	7%	25%	4%	19%		18%
% Non-local (sole-reason) attenders	8.7%	3.9%	4.8%	6.6%	2.1%	16.8%		9.6%
Number of local attenders	22,178	71,412	101,670	159,050	18,831	201,763		574,904
Number of non-local attenders	3,610	11,625	7,653	53,016	785	47,327		124,016
Number of non-local attenders (sole-reason)	2,244	3,238	5,248	13,996	412	41,832		66,970
Per capita spending by:								
Local attenders	$2.87	$2.74	$3.54	$2.04	$3.27	$3.29		$2.90
All non-local attenders	---	---	---	---	---	--		$48.92
Non-local attenders (sole-reason)	---	---	---	---	---	--		$14.40
Total spending by:								
Local attenders[2]	$ 63,651	$195,669	$359,911	$ 324,462	$61,577	$ 663,800		$1,669,070
All Non-local attenders	$176,592	$568,667	$374,366	$2,593,414	$38,400	$2,315,122		$6,066,562[3]
Non-local attenders (sole-reason)[2]	$ 32,314	$ 46,627	$ 75,571	$ 201,542	$ 5,933	$ 602,381		$ 964,368

Source: Audience Surveys and Institutional Data Inventories

[1] From Institutional Data Inventory, excludes attendance at in-school performances and attendance at events outside SMSA.

[2] Included in economic impact analysis.

[3] Does not sum due to rounding error.

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C. The Institutional Data Summary

Exhibit 7 presents the Institutional Data Summary. Included for each institution are total operating expenditures, total gross wages, taxes, total spending on goods and services, the percentage and amount of spending on goods and services that went to local vendors, the average institutional time and demand deposit, average spending per guest artist day, total number of guest artist days and total guest artist spending, the number of full-time and full-time equivalent employees, real estate taxes paid, self-provided municipal services, and special municipal services provided to the examined institutions. Comments regarding individual data items are provided in the footnotes to the exhibit.

Exhibit 7

Institutional Data Summary

	Ballet Metropolitan	Columbus Museum of Art	Columbus Symphony Orchestra	Center of Science and Industry	Players Theatre of Columbus	Columbus Association for the Performing Arts		Total
Total operating expenditure[2]	$303,189	$1,004,673	$1,047,864	$ 958,131	$153,747	$781,578		$4,249,182
Total gross wages	$158,462	$ 466,913	$ 743,574	$ 513,644	$ 54,325	$109,063		$2,045,981
Taxes	$ 0	$ 5,508[3]	$ 0	$ 0	$ 1,524	$ 14,345		$ 21,377
Total spending on goods and services	$144,727	$ 532,252	$ 304,290	$ 444,487	$ 97,898	$658,170		$2,181,824
% spent locally on goods and services	98.03%	41.00%	14.07%	91.75%	98.21%	93.92%		69.90%
Local spending on goods and services	$141,877	$ 218,223	$ 42,800	$ 407,810	$ 96,144	$618,158		$1,525,012
Average time deposit	$ 45,000	$1,047,000	$ 181,091	$ 700,000	$ 32	$ 0		$1,973,123
Average demand deposit	$ 2,000	$ 12,000	$ 32,586	$ 5,000	$ 2	$ 0		$ 51,588
Average spending per guest artist day	$ 37	$ 53	$ 44	$ 0	$ 20	$ 42		$ 42
Total number of guest artist days	60	20	275	0	35	2700		3090
Total spending of guest artists	$ 2,220	$ 720	$ 12,650	$ 0	$ 700	$116,100		$ 132,390
Number of full-time employees	18	34	18	38	4	11		123
Number of full-time equivalent employees	20	50	37	52	5	11		175
Real estate taxes paid by the institution	--	$ 0	$ 0	$ 0	$ 14,345	$ 1,524		$ 15,869
Annual cost of institution-provided police and security services	$ 0	$ 500	$ 0	$ 0	$ 0	$ 0		$ 500
Annual cost of institution-provided street maintenance	$ 0	$ 800	$ 0	$ 0	$ 0	$ 0		$ 800
Annual cost of institution-provided lighting (outdoor)	$ 0	$ 100	$ 0	$ 0	$ 0	$ 0		$ 100
Annual cost of private trash removal	$ 240	$ 0	$ 0	$ 0	$ 0	$ 0		$ 240
Assessed value of institutional tax-exempt property	$ 34,330	$2,513,070	$ 0[4]	$1,422,950	$ 6,940	$462,950		$4,440,240
Special municipal services provided to institution	--	--	--	--	--	--		--

Source: Institutional Data Inventories, Auditors' Reports.

[1] All monetary amounts rounded to nearest dollar.

[2] Excludes capital expenses and depreciation charges.

[3] State sales tax.

[4] Included in CAPA figure since CAPA owns the building.

D. The Employee Data Summary

Exhibit 8 presents the Employee Data Summary. Included in aggregate form across all examined institutions is information on the number of full-time and full-time equivalent employees, total persons and number of children attending public elementary or secondary schools in employee households, home-ownership and property tax data, and average employee time and demand deposits. Methods and procedures for arriving at these estimates are described in Appendix E of the User Manual of the Baltimore Case Study,[1] and further discussed in Section IV of this supplement.

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[1] David Cwi and Katharine Lyall, Economic Impacts of Arts and Cultural Institutions: A Model for Assessment and a Case Study in Baltimore, Research Division Report #6. New York: Publishing Center for Cultural Resources, 1977.

Exhibit 8

Employee Data Summary*

Total number of full-time employees	123
Total number of full-time equivalent employees	175
Percentage of full-time equivalent employees living in Columbus	93%
Total number of persons in full-time equivalent employee households	363
Total number of children attending public elementary or secondary schools from full-time equivalent employee households	25
Percentage of full-time equivalent employees owning home	38%
Average property tax payment by full-time equivalent employee owning home	$ 802
Percentage of full-time equivalent employees renting	62%
Average property tax paid out of rent of full-time equivalent renters	$ 725
Average time deposit of full-time equivalent employee	$2,658
Average demand deposit of full-time equivalent employee	$ 434

*Across all examined institutions.

E. Tax-Related Data

Inasmuch as the local tax structure directly affects the revenues to local governments that can be attributed to the local arts and cultural institutions examined in this study, this section presents in some detail the relevant tax structure and tax rates for the Columbus SMSA. These taxes include property, sales, income, hotel, restaurant, gasoline and transit taxes where applicable. This information was compiled from various sources. Each set of data items includes a footnote reference to the appropriate information source.

1) Property taxes:

Average residential property tax rates for each county in the Columbus SMSA for 1977 were:

Delaware	37.28 mills
Fairfield	37.08 mills
Franklin	44.96 mills
Madison	35.28 mills
Pickaway	37.26 mills

These rates were applied to the taxable value of real estate, which is equal to 35% of market value.

Source: 1978 Annual Report of Ohio Department of Taxation, Table 76

Average business personal property tax rates for 1977 for each county in the Columbus SMSA are shown below. The rates for business real property would be the same as the residential property tax rates shown above.

Delaware	37.36 mills
Fairfield	50.32 mills
Franklin	44.96 mills
Madison	35.96 mills
Pickaway	38.04 mills

Source: 1978 Annual Report of Ohio Department of Taxation, Table 76

Business property is assessed as follows:

(a) Business and public utility real property is assessed at 35% of market value;

(b) Public utility personal property is assessed at 100% of true value- 90% of public utility assessed valuation represents personal property; and

(c) Business inventories were assessed at 41% of true value in 1978 while furniture, fixtures, machinery and equipment were assessed at 46% of true value. The overall average assessment percentage for 1978 was about 43%.

Source: 1978 Annual Report of Ohio Department of Taxation.

2) Sales Taxes:

The state of Ohio levies a 4% sales tax on retail sales. It applies to both lodging and sales in restaurants.

Source: Ron Hohman, Ohio Department of Taxation.

Only Delaware County in the Columbus SMSA levies a local sales tax. One-ninth of the total sales tax revenue (state and local) is returned to Delaware County. 3.5% of state sales tax collections are distributed to counties and municipalities by formula.

Source: 1978 Annual Report of Ohio Department of Taxation, Table 12

Total state and local sales tax collection for each county for calendar year 1977 in the Columbus SMSA are shown below together with the share retained locally.

		Local Share
Delaware	$ 4,554,630	1/9
Fairfield	7,069,761	0
Franklin	111,443,832	0
Madison	2,150,481	0
Pickaway	3,136,424	0
Total	$128,355,128	

Source: Records of the Ohio Department of Taxation, unpublished

3) Income taxes:

The following table shows municipal income tax collections for municipalities levying an income tax in the Columbus SMSA. Taxpayers are liable for the tax where they reside or where they work. Also shown are the rates for each local tax.

	1977 Collections	Rate
Delaware County		
Cities		
Delaware	$990,000	3/4 of 1%
Villages		
Sunbury	$76,000	3/4 of 1%
Fairfield County		
Cities		
Lancaster	$2,515,000	1%
Villages		
Baltimore	$ 106,000	1%
Pickerington	$ 93,000	1%
Franklin County		
Cities		
Bexley	(not available)	1½%
Columbus	$62,218,000	1½%
Gahanna	$ 556,000	1½%
Grandview Heights	$ 908,000	1½%
Grove City	$ 498,000	1%
Hilliard	$ 402,000	1%
Reynoldsburg	$ 400,000	1%
Upper Arlington	$ 1,869,000	1½%
Westerville	$ 549,000	½ of 1%
Whitehall	$ 2,413,000	1½%
Worthington	$ 1,361,000	1%
Villages		
Canal Winchester	$ 109,000	1%
Dublin	$ 489,000	1%
Groveport	$ 120,000	1%
Obetz	$ 158,000	1%
Valley View	$ 515,000	1%
Madison County		
Cities		
London	$ 368,000	1%
Pickaway County		
Cities		
Circleville	$ 305,000	1%

Source: Income Tax Data for Ohio Cities and Villages Levying a Municipal Income Tax During 1976, Ohio Public Expenditure Council.

State of Ohio

1/2 to 3 1/2% on Ohio taxable income (income subject to intangibles, personal property tax excluded) as well as a personal property tax of 5% of annual income on productive intangibles (securities).

Source: "Columbus at a Glance," the Columbus Regional Information Service, the Columbus Area Chamber of Commerce.

4) Hotel taxes:

State of Ohio- none

City of Columbus- 3%

Source: Ron Hohman, Ohio Department of Taxation.

5) Restaurant taxes:

There are no local restaurant taxes, however the state sales tax of 4% is applied to restaurant sales.

Source: Tim Sublette.

6) Gasoline taxes:

The State of Ohio collects 7¢ per gallon of gasoline. The state retains about 75% of the total revenue with the remaining 25% distributed to counties, municipalities and townships. Counties receive about 9.3% of total revenues which is divided equally among the 88 counties (Franklin county received about $420,000 in 1978). Municipalities receive about 10.7% of total revenues which is distributed among the municipalities based on vehicle registrations (Columbus received $3,289,197 in 1978). Ohio townships receive about 5% of total revenues which they divide equally.

Source: Ron Hohman, Ohio Department of Taxation.

7) Transit taxes:

There are no local transit taxes in Columbus.

Source: Tim Sublette.

Data items not attributed to the Greater Columbus Arts Council were compiled by James W. McPherson, III, a research analyst for the Mid-Ohio Regional Planning Commission (MORPC) and Ron Hohman of the Ohio Department of Taxation.

F. Other Community Data

Other community data required for model estimations include total local business volume, the assessed value of business real property, local time and demand reserve requirements, residential and business property tax rates, the assessed value of residential housing, the number of children enrolled in local public elementary and secondary schools, state aid per pupil, other state revenues allocated to local governments on a per capita basis, local government operating costs (excluding public school and non-locally generated revenues), local public school operating budget (excluding non-locally generated revenues), total local population, assessed value of all non-school local government property and the assessed value of all local school property. These data items are presented below.

1) Total local business volume

Total retail sales	$2,533,560,000
Total wholesale sales	3,207,200,000
Value added	1,771,300,000
TOTAL	$7,512,060,000

Source: Table 3 -- SMSA's, County and City Data Book, 1977, US Dept. of Commerce -- Bureau of the Census, pages 555-556. Table 1 -- Gross Urban Product Report for MORPC Economic/Demographic Model II, 1978, page 14.

Scaled to 1978 using consumer price index: $10,881,396,000

2) Assessed value of business real property

County	1977 Business Real Property	1977 Public Utility Property (Real & Personal)	1978 Business Tangible Personal Property Equipment & Inventories	Total
Delaware	$ 41,770,950	$ 38,312,260	$ 49,042,443	$ 129,125,653
Fairfield	58,901,060	46,591,790	81,434,987	186,927,837
Franklin	1,459,925,360	437,805,230	978,867,045	2,876,597,635
Madison	14,062,230	45,461,470	17,514,111	77,037,811
Pickaway	27,473,860	46,443,740	58,894,712	132,812,312
TOTAL	$1,602,133,460	$614,614,490	$1,185,753,298	$3,402,501,248

Sources: (1) 1978 Annual Report of Ohio Department of Taxation, Table 76.

(2) Taxes Levied by Type of Governmental Unit and Total Value of Property, by County, Calendar Year 1978, Ohio Department of Taxation, Report PD-15, March, 1979.

(3) 1977 Assessed Valuation of Real Property in 88 Counties of Ohio by Class and Population Group, Ohio Department of Tax Equalization, Report V-4, issued June, 1978.

3) Local time deposit reserve requirement

3%

Source: Huntington National Bank

4) Local demand deposit reserve requirements

$ 0 - 2 million	= 7%
2 - 10 million	= 9 1/2%
10 - 100 million	= 11 3/4%
100 - 400 million	= 12 3/4%
400 million +	= 16 1/4%
Average	= 12 3/4%

Source: Huntington National Bank

5) Average residential property tax rates

Average residential property tax rates for each county in the Columbus SMSA for 1977 were:

By County:		By City:	
Delaware	37.28 mills	Columbus	42.17 mills
Fairfield	37.08 mills	Dublin	47.71 mills
Franklin	44.96 mills	Westerville	51.99 mills
Madison	35.28 mills	Worthington	52.75 mills
Pickaway	37.26 mills		

These rates were applied to the taxable value of real estate, which is equal to 35% of market value.

Source: 1978 Annual Report of Ohio Department of Taxation, Table 76.

6) Value of Local Residential Housing

The taxable values of residential real property for each county in the Columbus SMSA for 1977 were:

Delaware	$ 132,804,400
Fairfield	245,546,570
Franklin	2,157,862,480
Madison	51,763,870
Pickaway	69,306,190

Source: 1977 Assessed Valuation of Real Property in 88 Counties of Ohio by Class and Population Group, Ohio Department of Tax Equalization, Report V-4, issued June, 1978.

7) Total Number of assessed residences

Information not available from tax records.

8) Total Local Households

308,700

Source: Census of Housing (1975)

9) Number of Children enrolled in Public Schools and Gross Support per Pupil (by municipality)

	K-12 Enrollment	Gross Support Per Pupil
Delaware County		
Delaware City SD	3,740	330
Big Walnut SD	2,650	585
Buckeye Valley Local SD	2,365	548
Olentangy SD	1,673	312
Fairfield County		
Lancaster City SD	7,805	513
Amanda-Clearcreek Local	1,602	610
Berne Union Local SD	1,111	610
Bloom-Carroll Local	1,996	647
Fairfield Union Local	2,073	698
Liberty-Union	1,449	603
Pickerington Local SD	3,165	620
Walnut Twp Local SD	835	535
Franklin County		
Bexley City SD	2,280	431
Columbus City SD	83,409	552
Grandview Heights SD	1,392	243
Reynoldsburg City SD	5,107	817
Scioto-Darby City SD	4,335	564
South-Western City SD	17,336	564
Upper Arlington City SD	6,674	351
Westville City SD	10,234	720
Whitehall City SD	3,712	500
Worthington City SD	6,677	311
Canal Winchester Local	1,112	467
Dublin Local SD	2,190	245
Graceport-Madison Local	6,502	815
Hamilton Local SD	3,405	748
Jefferson Local SD	5,586	531
Plain Local SD	1,115	555
Pickaway County		
Circleville City SD	3,023	477
Logan Elm Local SD	2,676	483
Teap Valley Local SD	2,986	562
Westfall Local SD	2,005	453
Madison County		
London City SD	2,059	474
Jefferson Local SD	1,682	541
Jonathan Cider SD	1,654	536
Madison Plains Local	1,871	378

Source: State of Ohio Department of Education-Division of School Finance School Foundation Program Report- January Calculation of 1/16/79 FY 78-79, Report J40237, pgs 5,6,11,14.

10) Other State Revenues (per capita)

Information not available.

11) Local Operating Budget excluding Public School Costs and Non-locally generated revenues

$281,571,000

Source: Finances of Local Governments Bureau of the Census, 1975-1976.

12) Local Public School Operating Budget, Excluding $ from Non-local Sources.

Delaware City SD	$ 4,789,071
Lancaster City SD	13,062,807
Circleville City SD	Refused to give information over the phone.
Bexley City SD	4,100,000
Columbus City SD	133,579,102
Grandview Heights City SD	3,532,000
Reynoldsburg City SD	3,075,700
Scioto-Darby City SD	4,186,783
South-Western City SD	26,034,392
Upper Arlington City SD	13,819,378
Westerville City SD	15,264,496
Whitehall City SD	
Worthington City SD	12,407,714
Canal Winchester Local SD	1,536,449
Dublin Local SD	3,052,352
Graceport-Madison Local SD	10,018,000
Hamilton Local SD	1,240,167
Jefferson Local SD	
Plain Local SD	

Source: Conversations with each individual school district clerk-treasurer and/or superintendent. Data is for FY 1979.

13) Total Local Population by County (1975)

Delaware	50,836
Franklin	858,239
Pickaway	43,567
Fairfield	84,568
Madison	31,304
total	1,068,514

Source: Finances of Local Governments, op. cit.

Estimated 1976: 1,072,000

Source: Population Estimates and Projections, Bureau of the Census Series P-25 No. 739 Nov. 1978.

14) Assessed Value of all Non-School Local Government Property

The 1977 assessed value of all non-school local government property for each county in the Columbus SMSA were:

Delaware	$ 11,849,140
Fairfield	9,697,150
Franklin	158,903,368
Madison	2,506,850
Pickaway	1,890,750
total	$184,847,258

These values were set at 35% of the property's market value.

Source: Valuation of Exempted Real Property in the 88 Counties of Ohio, for the Tax Year 1977 as Reported to the Department of Tax Equalization by County Auditors in Compliance with Sections 5713.07 and 5713.08 of the Revised Code, Department of Tax Equalization, Report V-8, issued November 1978.

15) Assessed Value of all Local School Property

The 1977 assessed values of all local school property for each county in the Columbus SMSA were:

Delaware	$ 10,358,460
Fairfield	14,218,520
Franklin	142,207,280
Madison	4,503,130
Pickaway	6,005,720
total	$177,293,110

These values were also set at 35% of market value.

Source: Valuation of Exempted..., op. cit.

16) Percentage Distribution of Property Taxes by Type of Taxing District

Taxing District	Columbus	Worthington	Westerville	Dublin
Library	1.24%	-	-	1.43%
School	75.08	70.26%	70.57%	63.43
County	9.61	8.03	7.89	9.78
Transit Authority	1.37	1.14	1.12	1.39
Mental Health	4.79	4.00	3.93	4.87
Park	.52	.44	.43	.53
City or Village	7.32	7.52	16.06	7.03
Township	-	8.61	-	11.54

Source: MORPC

Data compiled by James McPherson, MORPC and Ron Hohman, Ohio Department of Taxation.

SECTION IV: WEIGHTING AND ESTIMATION TECHNIQUES USED IN THE STUDY

A. Overview

This section orients the reader to the general weighting and estimation procedures used in this study, and orients the reader to the wide range of technical problems involved in economic impact studies. The "User Manual" portion of the Baltimore Case Study* includes an earlier discussion of some of these matters. Methods and procedures described in this final section of the technical supplement should be considered in conjunction with the discussion in the "User Manual."

B. Audience Data

The systematic sampling of individuals in an audience necessitates the weighting of the number of respondents of differing party-sizes due to the differing probabilities of different size parties receiving a questionnaire. This weighting can be effected by multiplying the number of parties of a particular size times the party-size and then dividing by the sampling interval. For a detailed description of this procedure and caveats regarding its use, see the Metro Center working paper on this subject.** This procedure adjusts the number of parties of a particular size, and then uses these new party strata sizes as the basis for computing weighted averages for party expenditures. All estimates of party-spending or portions thereof were estimated in this fashion.

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*David Cwi and Katharine Lyall, Economic Impacts of Arts and Cultural Institutions: A Model for Assessment and a Case Study in Baltimore, Research Division Report #6. New York: Publishing Center for Cultural Resources, 1977.

**D. Alden Smith, "The Systematic Sampling of Parties at Arts and Cultural Events: Weighting Procedures for Party-Specific Items". Working paper. Center for Metropolitan Planning and Research, 1980.

The limited number of visitor cases due either to small sample size or to there being only a small percentage of visitors in the audience on the dates surveyed, necessitated an analysis of visitor mean spending across all sampled institutions rather than on an institutional basis. For this reason, mean visitor spending should be considered with caution. Furthermore, since selected institutions had few out-of-SMSA visitors during the sampling period, estimates of total "sole reason" visitors may be based on a small number of sampled visitors. These institutions are noted in the case study (c.f. Exhibit 7). Results for these institutions should be treated as tentative.

Spending was only attributed to local attenders and non-local sole reason attenders for purposes of estimating economic impact. This spending was calculated by taking the adjusted per party expenditures, converting them into per capita expenditures (on an institutional basis for local attenders, across all institutions for non-local sole reason attenders), and then multiplying these per capitas by the appropriate number of local and non-local sole reason attenders for the season. The total number of attenders for fiscal 1978 was reported by each institution's staff in the institutional data inventories and was later adjusted to exclude attendance at events outside the SMSA, and attendance at events held in schools.

C. Employee Data

The employee survey asked respondents to provide the zipcode of their place of residence. These zipcodes were used to allocate employees into local taxing districts that crossed political boundaries. The distribution of non-respondents' place of residence was assumed the same as that of respondents.

The statistics used for calculations utilize institution full-time equivalents which include aggregated part-time employees. The residence of respondent full and part-time employees was used to distribute each institution's full-time equivalents among local political and taxing jurisdictions. Similar procedures were required to weight other sample statistics to full-time equivalents including household size, home ownership, average time and savings deposits, and number of children in public primary and secondary schools. In order to solve one model equation for all institutions and to derive summary data for all employees, sample means were weighted by number of full-time equivalents at each institution. This procedure sought to assure that no one institution was over-represented in the sample.

Estimates of local spending by institutional employees were based on their own salary and wage income and not on total household income. (Each case study cites employee salaries and wages as a per cent of their total household income.) However, costs to local government are based on employee households (unless otherwise noted) since the majority of these effects are only meaningful in terms of households. This section concludes with a discussion of procedures used to estimate direct tax effects.

D. Institutional Data

Institutional data were collected using procedures described in Sections I and II. Total annual operating costs attributed to each institution exclude capital costs and depreciation expense (a non-cash item). Institutional fiscal years were generally not concurrent. The case studies simply identify and aggregate the impact of each institution's last fiscal year.

Basically, these tasks were straightforward accounting tasks requiring substantial fail-safing procedures but litte estimation or weighting. Specific comments or assumptions are detailed in the institutional data summary portion of Section III. In the few cases where governmental agencies or portions thereof could not provide expense statements, then appropiation budgets were used. This procedure excludes institutional spending of earned income from the analysis, and is thus very conservative. Such cases are footnoted in Section III where applicable.

E. Community Tax-related Data

Business Property Taxes

Estimation of property taxes attributable to the examined institutions proved difficult for the following reasons:

(1) selected taxes changed over time,

(2) there were a large number of taxing authorities,

(3) taxing districts were overlapping,

(4) procedures required data that was not always readily available, including market value or taxable value, the assessment ratio and the property tax rate for each jurisdiction for each kind of property under consideration,

(5) differing local procedures by type of local property, e.g. business inventories may or may not be taxable, or taxable at a different rate than business real property,

In general, the procedure followed was to weight the assessment ratio (ar) by the assessed market value (MV) for all taxing jurisdictions and then to weight the property tax rate (pt) by the taxable value (AV). This method must be used if ar differs by jurisdictions (otherwise ar may be weighted by AV). This procedure was used, where possible, to weight up to an aggregate tax rate for all local jurisdictions within a county, then the counties were weighted across the SMSA's

owners and renters. It should be noted that this procedure assumes that all employees either own a home or rent.

Sales Taxes

The calculation of sales taxes must take account of differing tax rates and taxable transactions by local jurisdictions. One can "tax" the attributable cash flow if one knows the jurisdictions affected and economic sectors involved. The calculation of sales tax effects requires the identification and aggregation of all institution, audience, and guest artist spending subject to sales tax which is then multiplied by the appropiate tax rate. If, for example, the cost of accommodation is not subject to sales tax, then spending in this sector must be excluded. The study uses the coefficient .004375 as the percentage of employee salaries that will result in sales tax revenue per 1% of the local tax rate.*

If only a percentage of locally generated sales tax revenues are returned to local jurisdictions then the local sales tax revenues are equal to that percent times the sales tax dollars generated locally.

Jurisdictions with differing sales tax rates can cause further disaggregation, if so attributable sales taxes were apportioned by the percent sales tax collected in each jurisdiction.

Transit Taxes

Transit taxes, where applicable, were levied in a similar fashion to sales taxes and were treated similarly.

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*Coefficient provided by Dr. David Greytak, of the Maxwell School of Citizenship and Public Affairs, Syracuse University.

Residential Property Taxes

Local residential property tax attributable to institutional employees that own homes was calculated directly using average property tax reported by the full-time employees in the employee survey weighted by the number of full-time equivalent employees at each institution.*

Property taxes due to institutional employees who rent living quarters were estimated in the following manner.** 20% of average rent was assumed to eventually go to landlord property taxes and it was assumed that 25% of renter employee's household income goes to rent. The following calculations show the amount attributable per renter employee:

	Mean Renter's Household Income	Rent (monthly)	Property Tax Attributable
Columbus	$14,500	$302	$725
Minneapolis/St. Paul	$13,381	$279	$669
St. Louis	$15,909	$331	$795
Salt Lake	$13,527	$282	$676
San Antonio	$13,636	$284	$682
Springfield	$16,438	$342	$822

The calculation, then, is simply: (Property Tax Attributable) (1-h) (FTE's), where FTE's is the number of full-time equivalent employees. The final calculation involves summing the taxes attributable to

---

*See the section on employee data for other weighting procedures.

**This procedure was suggested by Dr. Katharine Lyall.

Hotel Taxes

The same type of jurisdictional problems encountered with sales taxes are confronted with hotel taxes. To provide a conservative estimate of attributable direct hotel taxes, the following method was used. The estimated number of non-local attenders who came solely to attend an examined institution was multiplied by the average length of their visit to get the estimated number of person-nights in the area. This figure was adjusted by the percent reporting spending on lodging (corrected for party-size) to identify the number of paid person nights in the area. According to Laventhal and Horwath the average daily rate for occupancy in 1977 was $31.62,* or $15.81 per paid person night assuming two persons per room. Multiplying the $15.81 times the number of person nights gives the estimated dollar value of hotel spending by non-local attenders who are in town solely to attend the examined event. This amount of money, when added to the spending on hotels by guest artists at the examined institutions (from the institutional data inventories) gives an estimate of total spending attributable to the hotel sector. This amount was then "taxed" at the appropriate rate(s). This method does not count spending by local attenders on accommodations.

Parking Revenues to Local Governments

Parking revenues to local governments were calculated as follows. Assuming one party per car, the adjusted number of local and non-local sole reason parties was multiplied times the estimated per cent arriving

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*Laventhal and Horwath, "U.S. Lodging Industry, 1978." Philadelphia, Pa. 1978, p. 14.

by car to get the number of attributable cars. This figure was multiplied by the estimated per cent using public parking to get the number of cars using public parking. This number of cars was multiplied by the estimated cost per car (average length of stay in hours times average cost per hour in public lots) to get the parking revenues to local government for each institution. The figures were then summed across all examined institutions.

Gasoline Taxes

Gasoline taxes were estimated by multiplying the average distance traveled times the adjusted number of local and sole reason parties to get total miles traveled. This figure was then divided by an assumed 20 miles per gallon (to be conservative) to estimate attributable gallons used. Then local excise taxes per gallon were applied. No estimate was made of gasoline usage by the examined institution's employees (either business or personal usage) or gasoline usage by guest artists.

Restaurant Taxes

Restaurant taxes, where applicable, were calculated directly from estimated spending in restaurants and bars, using appropriate local tax rates.

Admission Taxes

Admission taxes, where applicable, were taken from the examined institutions' data inventories rather than estimated.

Income Taxes

Income tax estimates frequently involve jurisdictional problems as noted previously with other tax items. One frequent problem is whether the tax is collected where the employee lives, works or both. Income taxes, where applicable, were calculated in the fashion described in the Baltimore Case Study unless otherwise noted in a particular case study.

"Multipliers"

"Multipliers" were calculated in the fashion described in "Multiplier Analysis: Arts and Cultural Institutions."* This method requires estimates of the population of the study area, the ratios of employment to earning in the arts and cultural, retail, and hotel sectors of the economy, and attributable spending in these sectors. Employment to earnings ratios were calculated from 1976 County Business Patterns data, and adjusted for inflation using the consumer price index to provide 1978 estimates. The general analysis report prepared as part of this study includes a detailed discussion of "multiplier effects" and their place in regional economic impact analysis.

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*David Greytak and Dixie Snively, "Multiplier Analysis: Arts and Cultural Institutions," unpublished paper. The Johns Hopkins University Center for Metropolitan Planning and Research, April 1979.

TECHNICAL SUPPLEMENT TO
THE ECONOMIC IMPACT
OF SIX CULTURAL INSTITUTIONS
ON THE ECONOMY OF THE COLUMBUS SMSA
VOLUME II --APPENDICES

The Johns Hopkins University
Center for Metropolitan Planning and Research

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APPENDIX A

Audience Survey Dates and Response Rates

BALLET METROPOLITAN

Date	Distributed Forms	Returned Forms	Rejects During Editing	Valid Forms	Sampling Intervals	Total Attendance
10/14	172	145	3	142	1/2	380
10/15	121	103	0	103	1/2	388
12/14	210	106	0	106	1/8	1971
12/17	300	143	0	143	1/8	2897
n	803	497	3	494*	---	5636

* The three questionnaries rejected during editing were apparently not deleted from the sample. The response rate across the survey period was 62%.

COLUMBUS MUSEUM OF ART

Date*	Distributed Forms	Returned Forms	Rejects During Editing	Valid Forms	Sampling Intervals	Total Attendance
12/05	50	43	0	43	1/2	165
12/06	32	30	0	30	1/1	35
12/13 1	11	11	0	11	1/1	20
12/13 2	28	23	0	23	1/1	35
sub	121	107	0	107	---	255
1/30 1	10	9	0	9	1/2	185
1/30 2	13	12	0	12	1/2	
1/31 1	7	7	0	7	1/2	123
1/31 2	3	3	0	3	1/2	
2/01 1	0	0	0	0		185
2/01 2	4	4	0	4	1/2	
2/02 1	1	1	0	1	1/2	166
2/02 2	2	2	0	2	1/2	
2/03 1	9	8	0	8	1/2	95
2/04 2	16	10	0	10	1/2	188
2/06 1	3	3	0	3	1/2	328
2/06 2	9	9	0	9	1/2	
2/07 1	3	1	0	1	1/2	326
2/07 2	3	3	0	3	1/2	
2/08 1	1	1	0	1	1/2	237
2/08 2	3	3	0	3	1/2	
2/09 1	0	0	0	0		193
2/09 2	1	1	0	1	1/2	
2/10 1	1	1	0	1	1/2	210
2/10 2	17	4	0	4	1/2	
2/11 1	4	3	0	3	1/2	119
2/11 2	8	7	0	7	1/2	
2/13 1	17	6	0	6	1/2	164
2/13 2	0	0	0	0		
2/14 1	1	0	0	0	1/2	196
2/14 2	1	0	0	0	1/2	
2/18 1	0	0	0	0		112
2/18 2	5	5	0	5	1/2	

* Surveying on the first four dates listed was at a film series, surveying on the remainder of the dates was at viewing galleries. Total attendance is given for the attenders of the film series, however for the other dates the total attendance given is for the museum for the entire day, not necessarily gallery attenders.

COLUMBUS MUSEUM OF ART (CONT.)

Date	Distributed Forms	Returned Forms	Rejects During Editing	Valid Forms	Sampling Intervals	Total Attendance
2/22 1	1	1	0	1	1/2	213
2/22 2	4	3	0	3	1/2	
2/23 1	0	0	0	0		154
2/23 2	7	5	0	5	1/2	
2/25 1	0	0	0	0		175
2/25 2	8	8	0	8	1/2	
2/28 1	0	0	0	0		228
2/28 2	2	1	0	1	1/2	
3/03 1	2	2	0	2	1/2	239
3/04 1	1	1	0	1	1/2	235
3/07 1	8	2	0	2	1/2	137
3/07 2	3	3	0	3	1/2	
3/08 1	0	0	0	0		237
3/08 2	2	1	0	1	1/2	
3/13 1	1	1	0	1	1/2	247
3/13 2	27	20	0	20	1/2	
3/14 1	1	0	0	0		274
3/14 2	7	3	0	3	1/2	
3/15 1	4	2	0	2	1/2	194
3/15 2	2	2	0	2	1/2	
3/16 1	5	5	0	5	1/2	62
3/16 2	2	2	0	2	1/2	
3/17 1	30	27	0	27	1/2	198
3/17 2	21	19	0	19	1/2	
3/18 1	20	18	0	18	1/2	151
3/18 2	33	31	0	31	1/2	
sub	333	265	0	265	---	5571
Total	454	372	0	372*	---	5826

* The overall response rate across the survey period was 82%. Three questionnaires were deleted during subsequent computer edits.

COLUMBUS SYMPHONY ORCHESTRA

Date	Distributed Forms	Returned Forms	Rejects During Editing	Valid Forms	Sampling Intervals	Total Attendance
11/10	142	119	0	119	1/2	387
11/18	250	158	0	158	1/7	1855
12/02	160	65	0	65	1/10	2582
12/08	250	165	0	165	1/6	1553
n	802	507	0	507*	----	6377

* The overall response rate across the survey period was 63%. Three questionnaires were deleted during subsequent computer edits.

CENTER FOR SCIENCE & INDUSTRY

Date	Distributed Forms	Returned Forms	Rejects During Editing	Valid Forms	Sampling Intervals	Total Attendance*
12/05 1	20	14	0	14	1/2	26
12/05 2	8	7	0	7	1/2	
12/06 1	16	12	0	12	1/2	31
12/06 2	16	14	0	14	1/2	
12/07 1	2	2	0	2	1/2	26
12/07 2	4	2	0	2	1/2	
12/08 1	2	2	0	2	1/2	34
12/08 2	8	7	0	7	1/2	
12/09 1	23	15	0	15	1/2	187
12/09 2	62	35	0	35	1/2	
12/10 1	0	0	0	0	1/2	322
12/10 2	211	111	0	111	1/2	
12/11 1	11	6	0	6	1/2	25
12/11 2	16	7	0	7	1/2	
12/12 1	7	6	0	6	1/2	44
12/12 2	10	6	0	6	1/2	
12/13 1	3	1	0	1	1/2	42
12/13 2	12	7	0	7	1/2	
12/14 1	13	6	0	6	1/2	30
12/14 2	47	25	0	25	1/2	
12/15 1	43	20	0	20	1/2	50
12/15 2	29	20	0	20	1/2	
12/16 1	51	23	0	23	1/2	218
12/16 2	62	32	0	32	1/2	
12/17 1	0	0	0	0	1/2	270
12/17 2	161	93	0	93	1/2	
12/18 1	0	0	0	0	1/2	21
12/18 2	20	10	0	10	1/2	
12/19 1	44	19	0	19	1/2	94
12/19 2	21	17	0	17	1/2	
n	922	519	0	519**	1/2	1,420

* Total attendance given here is adult attendance for the day. Student and other groups are excluded.

** The overall response rate across the survey period was 56%. Three questionnaires were deleted during subsequent computer edits.

PLAYERS THEATRE OF COLUMBUS

Date	Distributed Forms	Returned Forms	Rejects During Editing	Valid Forms	Sampling Intervals	Total Attendance
11/02	55	43	0	43	1/2	127
11/11	107	89	0	89	1/2	242
12/7	69	53	0	53	1/2	177
12/9	105	87	0	87	1/2	236
12/14	87	63	0	63	1/2	205
12/15	82	62	0	62	1/2	220
12/16	38	31	0	31	1/2	211
12/17	80	53	0	53	1/2	182
n	623	481	0	481*	1/2	1600

* The overall response rate across the survey period was 77%. Five questionnaires were deleted during subsequent computer edits.

COLUMBUS ASSOCIATION FOR THE PERFORMING ARTS

Date	Distributed Forms	Returned Forms	Rejects During Editing	Valid Forms	Sampling Intervals	Total Attendance
11/7	135	99	0	99	1/4	822
11/8	71	41	0	41	1/4	569
11/12	260	180	0	180	1/7	2345
11/15	300	212	0	212	1/6	2013
n	766	532	0	532*	---	5749

* The overall response rate across the survey period was 69%. One questionnaire was deleted during subsequent computer edits.

APPENDIX B

Annotation Instructions

THE JOHNS HOPKINS UNIVERSITY
CENTER FOR METROPOLITAN PLANNING AND RESEARCH
BALTIMORE, MARYLAND 21218

Instructions for Annotating Budget Statements and Statements of Functional Expenses

1) The study coordinator must collect the auditor's report, the last income and expenditure budget summary for the fiscal year included in the auditor's report, and any questionnaires completed for service organizations (ASOL, TCG, Opera America, etc.) The budget summary is an independent internal document reflecting the institution's proposed budget. It is often prepared for the Board. Collect the last budget prepared in the fiscal year for which you have an auditor's report. (Ideally, you will collect a final quarter budget containing actual expenses for the first three quarters and a budget for the last.) These budget statements are probably more detailed than the auditor's report.

2) The study coordinator should make (and keep) a copy of all documents and forward a copy to David Cwi.

3) The study coordinator should identify the person most familiar with accounts payable, e.g., the bookkeeper or controller. Prior to contacting this person, the study coordinator will contact David Cwi to review the adequacy of each institution's "statement of functional expenses" and budget statement. If portions of the "statement of functional expenses" are not adequate, the study coordinator may have to rely on the budget statement. If neither is sufficiently detailed, it will be necessary to sample invoices as noted below.

4) The study coordinator will meet with the person noted in #3 in order to identify institutional expenditures with local firms. Line items depicting staff salaries may be ignored inasmuch as the percentage of staff that reside locally and the amount staff spend locally will be identified by the staff survey. Contractural labor services, e.g., guest artists, should be identified as local or non-local using the procedure described below. (The amount non-local "guests artists" spend while they are in your SMSA is identified using the attached instrument. Treat all expenditures made with non-local "guest artists" as spent completely out of the SMSA.)

SHRIVER HALL, HOMEWOOD CAMPUS – TEL. AC 301 - 338-7174

Procedure for Annotating Statements of Functional Expenses/Auditor's Report

After you have forwarded to the Metro Center the documents cited in #1 above, they will be examined to verify the appropriateness of the annotation strategy discussed below. Potential problems will be reviewed by phone before the study coordinator meets with institutional staff.

The notation described below seeks to identify total institutional expenditures with firms located in the examined SMSA. We are concerned with whether goods or services were purchased from a local source, even if the source was part of an enterprise with headquarters in another city. In short, expenditures are local if they are made locally, even if the firm is not locally owned and operated.

It is anticipated that the study coordinator and the person in charge of accounts payable will review each line of the statement of functional expenses. To help confirm the judgement of institutional staff regarding the proportion of each item that is spent locally, it would be helpful to ask staff to identify the local vendors from whom the goods and services in question were purchased. If there appears to be some doubt as to the accuracy of staff representation of local spending, in one or another categories, you will indicate this by "?" next to the line in question as described below.

a) next to each line item should be placed the % of that expense spent within the SMSA

b) if a majority of the remainder is spent out of the state, a check (✓) should be placed next to the % spent in the SMSA.

c) if a majority of the remainder is spent in the state, no check mark is needed.

d) When there is doubt about the remainder, write "?" next to the % spent in the SMSA.

e) If there is doubt about the % spent locally, write "?" next to the appropriate line item.

f) In special cases -- Twin Cities and St. Louis -- where two states are overlapped by the SMSA, "out-of-state" means out of both states and "in-state" means in either or both states.

Sample Annotation for Auditor's Reports or Budget Summary

			% in SMSA
1)	Legal and accounting	5,146	100%
2)	Maintenance supplies	18,000	60%
3)	Miscellaneous	461	90% ✓
4)	Office supplies	3,290	80%

✓ on line 3 implies that the majority of the remaining 10% was spent both out of the SMSA and out of state.

The lack of checks on lines 2 and 4 implies that the majority of the 40% and 20% respectively spent out of the SMSA were spent in the state.

If the person in charge of accounts payable is not sure what % of <u>any</u> line item (especially large categories) is spent within the SMSA, then the invoices for that item must be sampled. If the statement of functional expenses is not sufficiently detailed and you are not allowed access to the supporting budget summary, you will have to sample invoices. In order to deal with this issue at the outset, please send both budget and auditor's reports <u>before</u> you visit the institution.

APPENDIX C

Institutional Data Inventory

THE JOHNS HOPKINS UNIVERSITY

CENTER FOR METROPOLITAN PLANNING AND RESEARCH

BALTIMORE, MARYLAND 21218

E.I.S. Data Inventory

The current six city study involves many different types of institutions. This form will be used to supplement information gathered from institutional auditor's reports and budget statements. Many of the items of information requested are inapplicable to one or another type of institution. Please answer all items that apply, noting when the answer is an estimate.

Instructions

Please do not leave any lines blank:

if you mean zero, write "0"

if you mean not applicable, write "N/A"; (if entire sections are not applicable, please so indicate)

if you mean an estimate, write "E" after the answer.

Much of the information requested may be available from reports or applications prepared by th in-stitution for their service organization or various funding sources. To minimize the burden o the participating institutions, study coordinators should collect such material from institutional managers and use it to complete as much of this form as is possible. We suggest that Section II be completed at the same time the study coordinator visits the institution to annotate the statement of functional expenses. All data provided should be for the last fiscal year, which should be noted below.

Section I

Data Inventory
Institutional Operating Characteristics

Date: _____

Fiscal Year you are reporting: _____

Name of Organization: _____

Name and title of managing director: _____

Mailing Address: _____

Telephone Number: _____

Name of staff person most familiar with financial information/internal accounts: _____

Mailing Address: _____

Telephone Number: _____

SMSA Number: _____

Institution Number: _____

Audit basis:
cash _____
accrual _____
hybrid _____

Fiscal Year begins: _____

IRS non-profit?:
Yes _____ No _____

Year organization founded: _____

How many years in present facility: _____

In what year was present facility built: _____

PERFORMING ARTS ACTIVITIES

	Regular Season	Touring	Special Events**	In-School or other Programs**	Total
1. Total Paid Attendance					
2. Total Complementary or Free					
3. Total Attendance					
4. Total Attendance by Subscribers					
5. Total Attendance Group Sales					
6. Total Discounted Single Tickets					
7. Total Undiscounted Single Tickets					
8. Total Possible Attendance *					
9. % Capacity paid (1 ÷ 8)					
10. Total # of Productions					
11. Total # of Performances					

* Total possible attendance should reflect the fact that different halls may be used and that orchestra pit seating may be used for some performances.

** Please briefly describe these events and programs, e.g., "benefit concert local charity."

Special Events: _____

_____

_____

_____

In-school or other Programs: _____

_____

_____

_____

EXHIBITIONS, LECTURES, WORKSHOPS, OTHER ACTIVITIES

NUMBER OF ACTIVITIES AND ATTENDANCE: MAIN FACILITY

	Total #	Total Attendance	Total Paid
Main Facility			
Total Days Open to the Public per year			
Total Hours Open to the Public per year			
Total Attendance			
Total Paid			
Total # of Permanent Exhibitions (excluding touring)			
-- on average, how many minutes do people spend viewing each exhibition?		XXXXXXXXXX	XXXXXXXXX
Total # of New/Special Exhibitions (excluding touring)			
-- on average, how many minutes do people spend viewing each exhibition?		XXXXXXXXXX	XXXXXXXXX
-- total # developed by the institution		XXXXXXXXXX	XXXXXXXXX
-- total # developed by others*		XXXXXXXXXX	XXXXXXXXX

* merely being shown, but not developed by in-house curatorial staff

(continued on next page)

EXHIBITIONS, LECTURES, WORKSHOPS, OTHER ACTIVITIES

NUMBER OF ACTIVITIES AND ATTENDANCE: MAIN FACILITY (cont'd)

Main Facility	Total #	Total Attendance	Total Paid
Total # of lectures	_____	_____	_____
Total # of workshops	_____	_____	_____
-- on average, how many hours do people spend in each workshop?	_____	XXXXXXX	XXXXXX
Total # of classes	_____	_____	_____
-- on average, how many hours do people spend in each class	_____	XXXXXXX	XXXXXX
Total # of films	_____	_____	_____
Total # of other (please list):			
--	_____	_____	_____
--	_____	_____	_____
--	_____	_____	_____

Touring Activities -- see next page

EXHIBITIONS, LECTURES, WORKSHOPS, OTHER ACTIVITIES

NUMBER OF ACTIVITIES AND ATTENDANCE: TOURING/OUTREACH

Touring

	Total #	Total Attendance	Total Paid
Total # of Touring Exhibitions	_____	_____	_____
-- on average, how many minutes do people spend viewing each exhibition?	_____	XXXXXXXXX	XXXXX
Total Days Available to the Public per year	_____	XXXXXXXXX	XXXXX
Total Hours Available to the Public per year	_____	XXXXXXXXX	XXXXX
Total # of Lectures*	_____	_____	_____
Total # of Workshops*	_____	_____	_____
-- on average, how many hours do people spend in each workshop	_____	XXXXXXXXX	XXXXX
Total # of Classes*	_____	_____	_____
-- on average, how many hours do people spend in each class	_____	XXXXXXXXX	XXXXX
Total # of Films*	_____	_____	_____
Total # of Other (please list):			
--	_____	_____	_____
--	_____	_____	_____
--	_____	_____	_____

* Refers to outreach activities conducted outside the main facility.

Instructions

Contributions from individuals and businessmen may be received by the institution in either or both of two ways: as a cash contribution or a purchased membership treated by the institution as a contribution.

The information provided below allows institutions to distinguish between both sorts of cash contributions. Information is first sought on cash contributions that are not received as purchased memberships. Information is then requested on membership income.

"Individuals" refers to contributions from individuals taken by them as a tax exemption. "Businesses" refers to contributions taken as a tax deduction by a business. You are asked to identify the total number of contributions and then group them by size of contribution.

CONTRIBUTION PATTERNS

Cash Contribution (not including memberships)

Total number of individuals contributing _____

Total # grouped by size of contribution ____$0-49 ____50-99 ____100-499 ____500-999 ____1000 and over

Total number of business contributions _____

Total # grouped by size of contribution ____$0-49 ____50-99 ____100-499 ____500-999 ____1000-2499
____2500-4999 ____5000 and over

Memberships

Total number of individual memberships _____

Total # grouped by size of contribution ____$0-49 ____50-99 ____100-499 ____500-999 ____1000 and over

Total number of family memberships _____

Total # grouped by size of contribution ____$0-49 ____50-99 ____100-499 ____500-999 ____1000 and over

Total number of business memberships _____

Total # grouped by size of contribution ____$0-49 ____50-99 ____100-499 ____500-999 ____1000-2499
____2500-4999 ____5000 and over

CONTRIBUTION PATTERNS

(cont'd)

Please list all government agencies and levels of government, e.g. State Arts Council, from which you have received grants and specify the amount.

Granting Agency	Amount

Please list all private foundations from which you have received grants and specify the amount.

Foundation	Amount

Instructions: Categories I through III should be used for persons regularly working for the institution. Included are salaried and hourly staff -- i.e., persons for whom a W-2 form is prepared -- and volunteer and CETA staff. (see note below regarding volunteers). Also include all staff positions for whom a contract instrument is used. This will include staff-paid on a per service basis, e.g., ushers and musicians, but not specialized consultant services, e.g., auditor. Do not include guest artists or staff/cast of booked-in shows. Do not include personnel turnover in I - III, i.e., the total # of persons who have worked in the institution, but rather the number of staff positions these persons have filled. If the number of positions varies by time of year or by event, e.g., some shows require more dancers, please estimate average number of positions at any point in time during the fiscal year for which information is being supplied. Cite total number of positions in each category and total hours worked per year, including overtime, whether paid or not.

ORGANIZATIONAL STAFFING

	PAID FULL-TIME		PAID PART-TIME		CETA		FULL AND PART-TIME VOLUNTEER [1]	
I. ADMINISTRATIVE	# of positions	hrs worked per year	# of positions	hrs worked per year	# of positions	hrs worked per year	# of positions	hrs worked per year
Executive Director/General Manager/ Business Manager								
House Manager/Box Office Manager/ Dept. heads								
Development/PR/Fundraising								
Clerical/Secretarial								
Maintenance/Grounds/Restaurant-Bar/ Gift Shop/Shipping								
SUB-TOTAL								

[1] Note: Volunteer includes Guilds, Boards, and all other unpaid labor involved in running the organization

(continued on next page)

ORGANIZATIONAL STAFFING
(cont'd)

II. ARTISTIC PROGRAM/PRODUCTION	PAID FULL-TIME		PAID PART-TIME		CETA		FULL AND PART-TIME VOLUNTEER*	
	# of positions	hrs worked per year	# of positions	hrs worked per year	# of positions	hrs worked per year	# of positions	hrs worked per year
Non-performing: technical/managerial (set, lighting, costume, wardrobe, design, props, casting, stage manager, artistic director, etc.)								
Performing: musicians, actors, chorus, dancers, conductors								
Stagehands/ushers/box-office assistants/ guards/security/guides								
SUB-TOTAL								

III. EDUCATION/RESEARCH/OUTREACH								
Librarian/Editor/Photographer/Designer								
Instructor/Researcher/Curator/Conservator								
SUB-TOTAL								
TOTAL								

* Note: Volunteer includes Guilds, Boards, and all other unpaid labor involved in running the organization.

WAGE STRUCTURE

Instructions: Please estimate average wage rates using per year for full-time and per hour for part-time. Please estimate wage rates per position not per person. (See instruction from previous data section.)

Staff Categories	Paid Full-Time average income per year all positions	Paid Part-Time average income per hour all positions
I. Administrative		
Executive Director/General Manager/ Business Manager	_____	_____
House Manager/Box Office Manager/ Dept. Heads	_____	_____
Development/PR/Fundraising	_____	_____
Clerical/Secretarial	_____	_____
Maintenance/Grounds/Restaurant-Bar/ Gift Shop/Shipping	_____	_____

(continued on next page)

WAGE STRUCTURE (cont'd)

Staff Categories	Paid Full-Time average income per year all positions	Paid Part-Time average income per hour all positions
II. ARTISTIC PROGRAM/PRODUCTION		
Non-performing: technical/managerial (set, lighting, costume, wardrobe, design, props, casting, stage manager, artistic director, etc.)	_____	_____
Performing: musicians, actors, chorus, dancers, conductors	_____	_____
Stagehands/ushers/box-office assistants/ guards/security/guides	_____	_____
III. EDUCATION/RESEARCH/OUTREACH		
Librarian/Editor/Photographer/Designer	_____	_____
Instructor/Researcher/Curator/Conservator	_____	_____

Section II

Model Specific Data From Institutional Records

Average daily balance in <u>all</u> institution time (savings) accounts _____

Average daily balance in <u>all</u> institution demand (checking) accounts _____

<u>Note</u>: Both of the above figures may be calculated by choosing 3 days in each month randomly using the table below. This results in 36 balances which must be summed and divided by 36. If there is more than one checking or savings account, then the process must be repeated for each account (e.g., if two checking accounts, one would use the above procedure to create two averages, then simply add them and write the resulting number in the second blank).

RANDOM NUMBER TABLE

month in fiscal year

selected days	1	2	3	4	5	6	7	8	9	10	11	12
	22	24	16	13	19	2	7	12	25	28	31	1
	11	6	4	28	14	8	23	30	22	1	11	30
	10	29	5	15	3	18	21	20	15	9	17	26

Using the table: For month 1, the three days to sample are the 22nd, the 11th, and the 10th. The account statement may read as follows:

<u>Date</u>	<u>Transaction</u>	<u>Balance</u>
1/5	check	$20
1/10	deposit	$30
1/11	check	$10
1/23	check	$ 5

93

Using the random table, one finds that the balance for the 22nd is $10, because no transaction occurred between the 11th and the 23rd and the balance on the 11th was $10. The balance for the 11th and 10th can be read directly from the above statement.

Total local real estate taxes paid directly by the institution.* _____

Total payments to local government made in lieu of taxes. _____

Total admissions tax collected. Please (√) level of government. Amount

___ local tax _____

___ state tax _____

Total sales tax collected. Please (√) level of government. Amount

___ local tax _____

___ state tax _____

Other taxes collected and fees paid by the institution to government. Please list type, level of government and amount. Exclude payroll taxes and federal, state, or local income tax deductions from staff payrolls.

Tax or Fee	Level of Government	Amount
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

*Since most artistic and cultural institutions are non-profit, tax-exempt institutions, they will pay no real estate taxes. Some may own property which is not used for non-profit purposes, in which case they will pay property tax.

Please estimate total annual cost of municipal-type services provided by the institution:

1. Street lighting (include parking lots) _____
2. Landscaping _____
3. Street maintenance _____
4. Sidewalk maintenance _____
5. Trash removal (not including janitorial or maintenance costs) _____
6. Security and police (not including the cost of central station alarm services _____
7. Other (please list)

_____

_____

_____

Please list and describe any special municipal services provided to your institution for which the city or county does not require reimbursement (e.g., 5 policemen for two hours per week, etc.)

1.

2.

3.

4.

Please estimate the number of guest artists employed by the institution during the fiscal year under consideration. _____

Note: "guest artist" refers to any non-resident brought to the institution to direct, to give performances, exhibitions, lectures, etc. (e.g., a booked-in concert by a major symphony might involve 100+ guest artists). For our purposes, guest artists are non-residents in the community for a relatively short period of time. They may or may not be persons for whom the institution completes a W-2.

When guest artists are in your community, how many days on average do they stay? _____

Note: The average should take into account guest artists that may stay for as long as a month (e.g., an actor brought in to do a play) as well as guest artists brought in for only one day.

On average, how much will a guest artist spend per day, excluding the cost of accommodations? You may use per diem rates that are part of contractural agreements or simply your best estimate of likely daily expenditures on food, incidentals and entertainment. _____

When guest artists are in your community, how many nights, on average, do they stay? _____

Where do guest artists at your institution stay while in your community? And what does it cost them to stay there? Please indicate the number utilizing the choices given and the cost to the guest artist per night.

	# guest artists using	cost to each per night
Apartment owned by institution	_____	_____
Hotel or motel (please name)	_____	_____
--	_____	_____
--	_____	_____
--	_____	_____
Other (please list)		
--	_____	_____

What percentage of the institution's total annual paid ticket sales/admissions are sold through the following outlets:

1. Box/ticket office on premises _____
2. Group/block sales _____
3. Commercial ticket agencies _____
4. Ticketron outlets _____
5. Other sales in retail stores _____
6. Co-operative ticket booths (e.g., arts alliance sets up booth with aid of local bank to sell tickets for all member organizations) _____
7. Other (please specify)

   -- _____

   -- _____

   -- _____

Does the institution participate in any subscription series or offer memberships and services in conjunction with any other arts organizations. (e.g., a performing arts series that includes 2 plays, 2 dance recitals, etc.)

Yes _____ No _____

If Yes, please describe:

TO BE COMPLETED BY THE STUDY COORDINATOR ONLY

Please estimate the number of the following types of businesses within convenient walking distance of the institution that are open when the institution has performances or is open to the public.

	none	one or two	a few	many
Restaurants	____	_____	____	____
Bars	____	_____	____	____
Diners/fast food outlets	____	_____	____	____
Galleries and specialty shops	____	_____	____	____
Other retail establishments	____	_____	____	____

Were any of these businesses built solely or primarily to serve the examined cultural institution?

_____Yes _____No

If Yes, please indicate which and describe: _____

_____

Are there parking facilities near the examined institution that are operated by local government or local public agencies?

_____Yes _____No

Do parking revenues go directly to local government as general revenues, or are they used solely to pay costs incurred by the parking facility?

____general revenues ____the parking facility only ____both

TO BE COMPLETED BY THE STUDY COORDINATOR ONLY (cont'd)

Are there privately run parking facilities near the examined institution? (including facilities owned and operated by the institution.)

_____Yes _____No

Were any of these parking facilities built solely or primarily to serve the examined cultural institution?

private lots _____Yes _____No

public lots _____Yes _____No

Is there a local or state tax in addition to the parking fee?

_____ Yes _____ No

If Yes, how is the tax computed?

Local _____ State _____

_____ _____

_____ _____

What percentage of people utilizing the institution arrive by car? _____%

TO BE COMPLETED BY THE STUDY COORDINATOR ONLY (cont'd)

	Private Lots	Public Lots
What percentage of parties arriving by car are likely to use these parking facilities?	_____	_____
Approximately how long will the average audience/ visitor party park his car?	_____	_____
Approximately how much will they spend to park their car?	_____	_____

What percentage of parties arriving by car will use metered spaces? _____%

Approximately how much will they spend to park their car? _____

What is the assessed value of the institution's facility?

Property owned by the institution _____

Facilities rented by the institution _____

% of facility occupied by the institution _____

Note: If not available from the institution, these figures may be available from the local tax and assessment department.

APPENDIX D

Community Data Inventory

THE JOHNS HOPKINS UNIVERSITY
CENTER FOR METROPOLITAN PLANNING AND RESEARCH
BALTIMORE, MARYLAND 21218

BEST COPY AVAILABLE

TO: Study Coordinators

FROM: David Cwi

DATE: March 1, 1979

Attached is an expanded version of the annotated community data inventory distributed at the October Study Coordinator's Workshop. The revised draft has been developed after a review of the community data forwarded to date. We hope that it provides an adequate basis for data collection despite the differences that have appeared among partnership cities regarding such matters as type and number of taxing jurisdictions, state/local fiscal relations and the availability of particular data items.

After you have reviewed the attached, please contact me by phone. We will want to discuss problems and progress to date and identify if there are ways that we can assist you in gathering needed data or deriving estimates.

In the short run, your first priority is the implementation of the staff survey and the collection of budget statements and auditor's reports for our review. We would like to complete all data collection tasks by the end of March and look forward to promptly returning your audience studies as soon as keypunching is completed.

SHRIVER HALL, HOMEWOOD CAMPUS – TEL. AC 301 - 338-7174

THE JOHNS HOPKINS UNIVERSITY

CENTER FOR METROPOLITAN PLANNING AND RESEARCH

BALTIMORE, MARYLAND 21218

Community Data Series Reporting Protocol

Attached is a revised draft of the community data inventory distributed during the October Study Coordinator's Workshop. Each of the data items is reviewed and an attempt made to anticipate difficulties in collecting data.

The data required will be found in selected state, local and federal reports. The attached includes suggestions regarding appropriate state and local agencies to be contacted.

While many of the data items deal with the SMSA as a whole, it will be necessary in many cases to provide information on individual taxing districts within the SMSA. Even when the data item deals with the SMSA as a whole, you may find that the data has not been aggregated by an appropriate regional or state agency; in which case you will have to assemble SMSA data from reports prepared by appropriate local agencies within the several jurisdictions that comprise the SMSA.

We will be relying on you to document the community data series. Ideally, you could xerox relevant pages from reports cited, recording also the title of the report, the issuing agency, the fiscal year covered, and the date of publication -- in short, a standard footnote reference. You should also maintain a file of correspondence with agencies supplying information. Be assured that you need not forward copies of documentation to Johns Hopkins. (We will give full credit to you for the information you supply, so you should make sure that you have documented the data should persons raise questions concerning findings.)

After you have reviewed the attached inventory, it will become apparent that no form can be devised to take account of the idiosyncrasies of participating cities. Since the notion of a standardized form seems inappropriate, we think it best that you simply report data items in the same order as they are listed on the annotated inventory We would also appreciate if you would cite the title of the report from which you took the information, the agency issuing the report, the page in the report, and the fiscal year covered. In short, please provide data values in the same order as the attached inventory, and include a footnote reference for our records.

SHRIVER HALL, HOMEWOOD CAMPUS – TEL. AC 301 - 338-7174

When you must construct data for the SMSA as a whole by adding together local data, please cite all local agency reports and data values used. Similarly, when data on individual jurisdictions is called for, please cite each data values and reports used.

After reviewing the attached, it will be apparent that some local impacts, especially tax revenues generated, may require inventiveness on your part and the advice of local or state agency staff. For example, data on tax revenues retained or generated locally may be impossible to determine in cases when the tax is a state tax, and revenues are not returned to the locality on a formula basis. When revenues are collected in the SMSA by the state, mixed with funds from other local jurisdictions and returned through various state-local intergovernmental transfers, it may be difficult to determine locally retained revenues attributable to the examined institutions. It may be necessary to consult local experts on your state's tax policies should per capita or other formulas for state aid and/or the return of particular tax revenues not exist.

Finally, there may be special local taxes of interest which are not dealt with in our model, and which may be applied by all or only some local jurisdictions. As a first step, you would do well to simply identify the major state and local tax sources by examining the Budget reports of your city and county localities or by contacting knowledgeable persons in your regional planning agency. Similary, you would do well to request reports from the State Treasurer's Office that detail state/local fiscal relations. This discussion may help to make clear why we recommended at the outset that you involve knowledgeable local planners in this project.

ANNOTATED COMMUNITY DATA INVENTORY

The following inventory of community data is a revised version of the draft reviewed during the October Study Coordinator's Workshop. The inventory lists the data item, its notation, model equation in which it appears, page reference in the user manual and suggested sources of information.

Data Items

1. Total Local Business Volume (total local retail sales + total local wholesale sales + value added to raw materials by local manufacturers): TBV, B-4.1, p. 43.

   Source: Local planning or economic development department; Bureau of Census publications - Retail Trade Area Statistics, Wholesale Trade Area Statistics, and Census of Manufacturers.

   Comment: Identify TBV for the SMSA as a whole, except if sales tax rates vary within the SMSA (see #14). A regional planning or economic development department may have aggregated this information for the several units of government within the SMSA, otherwise the information must be gathered for each local unit in the SMSA and aggregated. Census or community data may be old (e.g. 1967) in which case the figure for TBV must be increased to reflect current values. TBV can be updated by assuming an increase equal to the increase in sales tax receipts during the period in question, adjusting for changes in the tax rate. If it is necessary to adjust TBV, contact Doug Smith.

2. Total assessed valuation of business real property: AV, B-4.1, p. 43.

   Source: Local tax office.

   Comment: Because the SMSA may consist of several taxing jurisdictions, this may complicate your efforts to identify AV. There are two complications. AV may be comprised of separate valuations for business (a) buildings, (b) equipment, and (c) inventory. If differing assessment ratios (ar) are used for (a), (b), or (c) by all or some of the SMSA's taxing jurisdictions, then the assessed valuation for (a), (b), and (c) must be listed separately for each taxing authority in the SMSA. Otherwise, we cannot utilize equation B-4.1 which divides AV by the appropriate ar. See #3 and #13 below.

3. The ratio of assessed valuation to full market value of business property: ar, B-4.1, p. 43.

   Source: Local tax office.

   Comment: "ar" refers to the percentage of full market value used in determining the assessed valuation of business property. It is conceivable that "ar" might vary by jurisdiction or by type of property, prompting the need for separate AV values for each type of property in each local jurisdiction (c.f. #2 above). When assessed valuation is 100% of full market value, ar is 1. Should "ar" values vary by type of business property or by jurisdiction, then a list should be prepared citing all local jurisdictions that tax business property, the type of property tax, and AV and ar values for each type. This will allow a weighted SMSA value for AV and ar. In addition, see #13 below. You may need, in assembling AV and ar values to also cite business property tax rates by jurisdiction and type of property.

4. Local inventory-to-business volume ratio: ir, B-4.2, p. 45.

   Source: Local planning, tax assessment, or economic development agency; or use a national ratio derived from an IRS (Internal Revenue Service) publication, Statistics of Income.

   Comment: The local area is the SMSA as a whole. This item is calculated as the ratio of the value of end-of-year inventory to gross sales; it is thus the value of inventory as a percentage of gross business receipts. (Cite the national figure used in the Baltimore Study if local data is not available.)

5. Local time deposit reserve requirement: t, B-5, p. 46.

   Source: State banking regulatory agency; a local savings institution official.

   Comment: When subtracted from 1, the item indicates the percentage of deposits in time (savings) accounts that may be used by financial institutions for loans. The value to be used is for the SMSA as a whole. A complication is introduced because commercial banks and state chartered banks and savings and loans may have differing reserve requirements inasmuch as they are regulated by differing federal or state agencies. This will recuire that t be weighted to reflect the volume of savings with particular types of local savings institutions. Polk Profile of Change may be available at a local bank research department or data may be collected by the appropriate state regulatory agency listing total time deposits (savings) in Banks, Savings and Loans and Credit Unions. The calculation of t should be weighted to reflect the percentage of savings dollars held by federal and state chartered banks, savings and loans and credit unions and the differing state and federal reserve requirements. Contact Doug Smith for details.

6. Local Demand deposit reserve requirement (checking institution regulation): d, B-5, p. 46.

   Source: State banking regulatory agency; a local checking institution official.

   Comment: Same as number 5 above for deposits in checking accounts. Inasmuch as savings and loans and credit unions may not have demand (checking) accounts, the complications identified in #5 above may not arise.

7. Local cash-to-business volume ratio: cbv, B-5, p. 46.

   Source: State economic development agency; Bureau of Census, U.S. Statistics of Income, and IRS (Internal Revenue Service), U.S. Corporate Tax Returns. (Selected years)

   Comment: The ratio reflects cash held in reserve by businesses as a percentage of total business volume. Since this may vary due to economic conditions, an average cbv may be calculated by averaging cbv ratios for two or more years. If a local cbv cannot be calculated, we will use an updated national figure.

8. Local residential property tax rate: pt, G-1.1.1, p. 51

   Source: Local tax office or planning department.

   Comment: There is no SMSA property tax rate; rather, there is usually a different rate for the various property taxing jurisdictions within the SMSA (general service governments, school districts, and/or other property taxing units.) Institutional employees may reside in more than one taxing district. If reliable data is available from the staff survey, then there is no need to utilize equation G-1.1.1 to estimate property tax payments by employee homeowners. Consequently, there will be no need to identify "pt", "TRA" or "R". (See #11 and #12). However, if there are low response rates to the staff survey or the question dealing with property tax payments, or if reported values appear unreliable, then it will be necessary to utilize equation G-1.1.1 and develop values for "pt", "TRA", or "R". Study coordinators have been asked to examine employee residence to determine how employees are distributed among local jurisdictions and taxing districts. In particular, it will be important to identify the taxing districts in which homeowning employees reside and the number of homeowning employees in those jurisdictions. This can be accomplished utilizing the staff survey, again assuming adequate response to this question.

9. Total Full-time Employees and Full-time Equivalents: Emps, B-5.

   Source: Institutional Data Inventory

10. Percentage of employees owning homes locally: h, G-1.1.1, p. 51.

    Source: Staff Survey.

    Comment: Examine staff survey response rates to determine if the survey can be used to identify percentage of employees owning homes, and reported property tax payments. Even if there are low response rates, we may be able to estimate homeownership and tax payments. If it proves necessary to use equation G-1.1.1, we hope you will not only report residential AV for each of the taxing jurisdictions in which employees reside, but also identify if AV is calculated other than as a percentage of fair market value, e.g., in terms of replacement or original cost.

11. Value of local residential housing: TRA, G-1.1.1, p. 51.

    Source: Local tax office or planning department.

    Comments: See #8 above. If it is necessary to use equation G-1.1.1, then TRA and R (see #12) must be developed for each local jurisdiction in which employees own homes. (Percentage owning homes and jurisdictions of residence can be determined via the staff survey.)

12. Total number of assessed residences: R, G-1.1.1, p. 51.

    Source: Local tax office or planning department.

    Comment: R must be consistent with TRA (#11). If the value of residential housing (TRA) includes rental or condominium apartments as well as single family homes, then R must include the total number of apartment units and not simply the total number of buildings with apartments.

13. Business property tax rate (Business inventory tax rate): pt, G-1.1.2, p. 53.

Source: Local tax office or planning department.

Comment: The notation "pt" appeared in #8 above. In many cases, residential property tax rates (#8) and business rates (#13) are identical. However, this may not be so or business rates may be different from residential rates in some but not all local jurisdictions. In addition, pt may vary for plant, equipment, and inventory (see #2 above). While we sought to escape assembling data on jurisdictions that tax employee residential property, you will have to assemble data on business property tax rates for all jurisdictions in the SMSA that tax business property. Contact Doug Smith. See #3 above.

14. The percentage of locally generated sales tax revenues retained locally: st, G-1.2, p. 54.

Source: State tax office; local tax office.

Comment: Sales taxes may be imposed by the state, by all or some local jurisdictions, or both. "st" is the percentage of sales tax revenues retained, not the sales tax rate. If a local jurisdiction assesses a sales tax and all revenues are retained, then st = 1. If sales tax rates or percentage revenues retained locally vary by taxing jurisdictions within the SMSA, then it may be necessary to determine a TBV for each of the counties (and the city if it is not covered in county data). In this case, you would list all jurisdictions whose TBV values were aggregated to derive the SMSA-wide TBV and also cite the sales tax rate in each jurisdiction and st, the percentage of revenues retained locally. If there is a variance in the type of sales that are taxed, this should also be noted.

If the sales tax is collected by the state, it may be returned on a formula basis to the localities or become a part of the state's general revenues. If the former, then a separate st should be cited for the state. If the latter, then it will be necessary to consult local experts on your state's tax policies. Contact Doug Smith should sales taxes vary within the SMSA.

15. Sales tax revenues generated locally: STR, G-1.2, p. 54.

Source: State tax office; local tax office (retail sales tax divisions).

Comment: STR may be any combination of the following: state, local, both state and local, and bi-state. For each case, related STR and st values should be listed together by local jurisdiction and state. Where st = 0 this should be noted. Separate local STR values should total the SMSA-wide STR.

16. Total income tax revenues retained by the local jurisdiction: TYT, G-1.3, p. 55.

Source: State or local fiscal officer.

Comment: Income taxes may be imposed by the state, by all or some local jurisdictions or both. In addition, a locality may charge a commuter tax on the earnings of non-residents as well as tax the income of residents. Finally, the state may collect income tax and return a portion of it to the local jurisdiction in which the tax payer resides (or, the locality may "piggy back" its tax on the state tax). Similar to #14, if the income tax rate varies -- either "piggy back", percentage returned by the state, commuter versus resident or by local jurisdiction -- then it will be necessary to list each jurisdiction's retained income tax revenues, distinguishing tax revenues paid by commuters for those counties with both commuter and resident income taxes.

Please also list income tax rates for the taxing jurisdictions in which employees reside including "piggyback" taxes, commuter taxes and the state tax if the state is required to return a percentage to each jurisdiction. The percentage revenues retained by the local jurisdiction should be noted if less than 100%.

17. Total local households: HH, G-1.3, p. 55.

Source: Local or regional planning department.

Comment: Identify total local households. If there is a commuter tax, then a separate HH will be required indicating the number of local households paying the commuter tax rate.

18. State per pupil educational grant to the local community: SE, G-1.4.1, p. 57.

Source: State education agency; local fiscal officer; local school agency fiscal officer.

Comment: As stated in the model user manual, it is supposed that SE is a grant per pupil and the grant is the same for each local jurisdiction. This may not be correct and the grant may vary, in which case SE should be cited for each school district in the SMSA. Or, it may be possible to construct an SE value for each school district by dividing state aid for regular programs (as opposed to special education) by total enrollment in each school district.

19. Other state revenues attributable to the institution and its employee households (provided solely on a per capita basis): OR, G-1.4, p. 56.

Source: State fiscal agency; state planning department; local fiscal officer.

Comment: If OR is treated like SE -- per capita aid to educate the public school children in employee households -- this requires that individuals in employee households eligible for aid be identified. But OR may refer to per capita aid not directed at persons with special needs but rather jurisdictions as a whole. For example, state revenue sharing may be provided on a per capita basis or per capita aid provided for roads or other services used by the entire local population. If aid is forthcoming on other than a per capita basis, it may be possible to construct OR by listing state aid to services in the SMSA that can be utilized by all residents, then dividing by the local population. Again, this may have to be done separately by county.

20. Local operating budget excluding public school costs and non-locally generated revenues: B, G-2.1, p. 59.

Source: State local government agency report on local government finances; local fiscal officer.

Comment: The local area is the entire SMSA. There will be a B value for each local jurisdiction within the SMSA where institutional employee households reside. You will have to assemble total operating budgets for all jurisdictions in the SMSA for which you will have information from the employee survey. If there are scores of incorporated municipalities, you should strive for all major jurisdictions in which staff reside (contact Doug Smith). Exclude from all local operating budgets the cost of public schools as well as all non-local revenues. Do not include non-recurring costs. Non-local revenues include federal and state aid.

21. Total local population: POP, G-2.1, p. 59.

Source: State planning department; local or regional planning department.

Comments: This should be provided for each of the jurisdictions included in #20, with each jurisdiction's POP listed separately.

22. Local public school operating budget, excluding revenues from non-local sources: SB, G-2.2, p. 61.

Source: Local school agency fiscal officer.

Comment: The comments to #20 above apply here as well. Cite budgets for all school districts in which employees have enrolled children. Exclude revenues from non-local sources.

23. Number of children in employee households attending public schools: C, G-2.2.

Source: Staff Survey

24. Total number of persons in staff households: EHH, G-2.1.

Source: Staff Survey

25. Total enrollment in local public primary and secondary schools: TC, G-2.2, p. 61.

Source: State education department; local school agency.

Comment: Data should be provided for each school district in which employees have enrolled children.

26. Value of all non-school local governmental property: GPm, G-3, p. 62.

Source: State tax (assessment) office; local tax (assessment) office.

Comment: The values for these items may be in costs today of replacing governmental property or the original cost of these facilities expressed in current dollars. Cite convention used in lieu of fair market value by local assessors.

27. Value of all school-related governmental property #2: GPs

Source: State tax (assessment) office; local tax (assessment) office.

Comment: The value for these items may be in costs today of replacing governmental property or the original cost of these facilities expressed in current dollars. Cite convention used in lieu of fair market value by local assessors.

28.. Assessed value of institutional tax-exempt property: AV, G-4, p. 63.

Source: State or local tax (assessment) office.

Comment: An assessed value must be identified for all institution owned or rented tax exempt property. Cite the jurisdiction assessing the property and the method utilized if other than fair market value -- e.g., replacement cost or original cost in current dollars. The jurisdiction's assessment ratios and business property tax rates should also be noted here if not already cited in providing values for #3 and #13. If a property is owned by the local jurisdiction -- e.g. municipal museum -- please note this.

APPENDIX E

Sample Calendar Instructions

THE JOHNS HOPKINS UNIVERSITY

CENTER FOR METROPOLITAN PLANNING AND RESEARCH

BALTIMORE, MARYLAND 21218

TO:

FROM: Doug Smith

RE: Sample Frame Documentation

DATE: July 3, 1979

Enclosed you will find "calendars" from each of the institutions participating in your audience study. Each calendar has been filled in with the local* performance/exhibition information for all events that took place at that institution during the sampling period. Also, each day that sampling occurred has been marked.

For the purposes of documentation, the sampling period is defined as the time span that includes the opening night (day) of the production/exhibit that precedes the first event sampled thru the closing night (day) that follows the last event sampled.

We would like you to verify this information. In addition, we would like you to make additions/deletions of performances/exhibitions in those instances where we do not currently know of schedule changes or whether other performances/exhibitions were held. Unless this is done, we will not be able to make any final decision as to the representativeness of the sample. We need your prompt attention to this matter, so that we can return your audience studies to you. The managers of the various institutions should be able to assist you in this matter.

Even for the events that were not sampled (but did occur during the sampling period), it is imperative that we know the total attendance for these events. Please write this information in the appropriate "day-block," with the name and type of performance. An example is given on page two.

In cases where only a handful of performances are given over the entire season, they should all be listed. This may require a separate sheet attached to the calendar.

* Local, as usual, means in SMSA

TO:
FROM: Doug Smith

Example: The Repertory Theatre (XX)

September 1978					1	2
3	4	5	6	7 "Hamlet" 7:30 pm	8 8 pm TA 100 SI 1/1 NR 19 RR 52%	9 2 pm → 8 pm
10 2 pm, 8 pm →	11	12 Hamlet 8 pm	13 8 pm TA 100 SI 1/1 NR 19 RR 52%	14 8 pm	15 8 pm	16 2 pm → 8 pm
17 → 2 pm, 8 pm	18	19	20	21	22	23

Key: TA = total attendance

SI = sampling interval used

NR = number of questionnaires returned

RR = response rate (raw)

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In the example, we see that "Hamlet" opens on the 7th -- the start of the sampling period. The first event sampled is the 8th. The last event sampled is the 13th and the closing night is the 17th. You would verify that these dates and times are correct, add or delete performances as necessary, and fill in the total attendance figures for the 7th, for both shows on the 9th and 10th, for the 12th, 14th, and 15th, and both shows on the 16th and 17th.

It should be noted that we have provided calendars for six (6) months. Only the months that cover the applicable sample period need be filled in.

When you return the calendars to us, please include any performance calendars that the institutions distribute. If you have any questions, please feel free to call.

Thank you.

cc: David Cwi

Attachments

APPENDIX F

Documentation Protocol

THE JOHNS HOPKINS UNIVERSITY
CENTER FOR METROPOLITAN PLANNING AND RESEARCH
BALTIMORE, MARYLAND 21218

Documenting Data Collection Efforts

The six city project has involved a number of data collection tasks. Except for the community data inventory, all efforts have focused on individual institutions -- their audiences, financial and operating characteristics, and staff households. As part of an overall evaluation of data quality, we are seeking to document various aspects of data collection and data handling.

Much of the information needed has already been provided, e.g., the Survey Event Report Forms. The aspects of data collection that particularly concern us now involve the organization, management and execution of tasks. We are especially concerned with the identification of the practices that were adopted for most of the studied institutions and circumstances that led to different practices on the part of individual institutions. This information can help us to identify the extent to which differences or similarities might be due to the data collection procedures as well as identify potential impacts on data quality.

If you are aware or suspect for any reason that data quality varies by institution -- e.g., some institutions did not seriously attempt to identify local expenditures -- please identify the institutions and the reason for your suspicion.

Please read over the attached documentation issues and contact Doug Smith if you have any questions. We hope that this last task is not too burdensome and that it can be completed within the next two weeks.

1) Audience Survey

(a) Completed and "cleaned" SERF's

(b) Distribution and Collection:

-- Was the same person responsible for supervising the distribution and collection of questionnaires at every institution, or did this vary by institution? Was the same person responsible within individual institutions? How was this person trained?

-- Did the same group of people distribute and collect at each institution? Who were these people? Ushers? Other volunteers? Arts Agency staff? How were they trained?

-- What constraints were imposed, either by the institution-type or the management? (Be sure to discuss problems such as underestimated attendance or large numbers of ineligible respondents.)

-- Did the study coordinator participate in the physical handout/collection process? If so, what portions, and to what degree? (Be sure to fully describe the relationship between the study coordinator and surveying personnel.)

-- What is the study coordinator's opinion of the survey procedures? Did the process vary by institution? (e.g., questionnaires distributed in programs instead of separately, announcement from the stage at some places and not at others) Were staff trained prior to distributing and collecting questionnaires?

-- Essentially, how was the process organized and monitored and what improvements could be made?

(c) Editing:

-- Was the same person responsible for supervising the editing of questionnaires at every institution, or did this vary by institution? Was the same person responsible within individual institutions?

-- Did the same group of people edit the questionnaires for each institution? Who were these people? Volunteers? Institutional staff? Arts Agency staff?

-- How were the editors trained? By whom?

-- Did they have any difficulty understanding the editing protocols provided by the Metro Center? What improvements, if any, could be made on these protocols?

-- How much time, on average, did it take to edit one questionnaire?

(d) Complete documentation of sampling frames. You will receive a calendar for each institution. It will show all the events in the sampling period, of which we are aware, and indicate those sampled. In many cases, this information will be complete, and you need only verify it. In other cases, it will be necessary to fill in performances that are not listed. Specific instructions will accompany the calendars.

(e) Was the keypunching verified?

2) Staff Survey

(a) Distribution and Collection:

-- Who handed out and collected surveys?

-- What is the study coordinator's opinion of the quality of the survey procedures and on what facts is this opinion based?

-- What constraints were imposed, either by the institution-type or the management?

-- Did the study coordinator participate in the physical handout/collection/edit process? If so, what portions, and to what degree?

-- Essentially, how was the process organized and monitored and what improvements could be made?

(b) Editing:

-- Who edited the surveys?

-- How were they trained?

-- How much time did they spend?

3) E.I.S. Data Inventory

-- Did one person meet with all institutions, or did several persons each meet with several institutions?

-- Were the inventories completed by someone at the institution or were they completed jointly with the study coordinator or someone designated by him/her.

-- Who supplied the information?

-- Were the same procedures used for each institution?

-- What constraints were imposed on this process (if any)?

-- What is the study coordinator's opinion of data quality? (Cite the reason for your judgment.) Please review problems in gathering data.

4) Annotation of Auditor's Report on Budget Summary:

-- Did one person meet with all institutions, or did several persons each meet with several institutions?

-- Who supplied the information?

-- Was it the person most familiar with accounts payable?

-- How much time did they spend?

-- What is the study coordinator's opinion of the quality of the data? (Cite the reason for your judgment.)

-- Was the same procedure applied to every institution?

-- What constraints were imposed on this process (if any)?

-- Was the person who provided the data asked to name local suppliers, or was their estimate simply accepted without challenge?

---.Did the study coordinator personally participate in the review of each item or was he only able to request information which was supplied at a later date?

5) Community Data Inventory:

(a) If completed properly, the Community Data Inventory should include an appendix of sources, references and comments about the data. Please review problems in gathering data, special tabulations that might have been required, etc.

6) Adjustment for Touring out-of-SMSA:

(a) The E.I.S. Data Inventory asks for various kinds of attendance figures. However, we need an estimate of the total attendance at performances/exhibitions in the SMSA, for each institution, including touring activities within the metropolitan area. Please forward this data as soon as possible, distinguishing main facility from other sites. It should be noted that all touring out of the SMSA would be excluded, as would performances given in schools. It would include attendance at the institution's main facility as well as attendance for tours in the SMSA.